DVP-S325/S525D/S725D

RMT-D108O/D108P/D109P/D111O/D111P

SERVICE MANUAL

AEP Model
DVP-S325/S525D/S725D

East European Model
North European Model
DVP-S325/S525D/S725D

Russian Model
DVP-S325/S525D/S725D

Australian Model
DVP-S525D/S725D

E Model
DVP-S725D

Self Diagnosis Supported model

Photo: DVP-S725D

SPECIFICATIONS

CD/DVD player

Laser Semiconductor laser
Signal format system PAL/(NTSC)

Audio characteristics

Frequency response
DVD (PCM 96 kHz): 2 Hz to 44 kHz (±1 dB)* (S325/S525D)
DVD (PCM 96 kHz): 2 Hz to 44 kHz (±0.5 dB)* (S725D)
DVD (PCM 48 kHz): 2 Hz to 22 kHz (±0.5 dB)
CD: 2 Hz to 20 kHz (±0.5 dB)

Signal-to-noise ratio
More than 110 dB (LINE OUT (AUDIO) connectors only) (S325/S525D)
More than 110 dB (AUDIO OUT connector only) (S725D)

Harmonic distortion Less than 0.0025%
Dynamic range More than 100 dB (DVD)
More than 98 dB (CD)

Wow and flutter Less than detected value (±0.001% W PEAK)

Outputs and inputs

	Jack type	Output level	Load impedance
LINE OUT (AUDIO) (S325/S525D)	Phono jacks	2 Vrms (at 50 kilohms)	Over 10 kilohms
AUIO OUT (S725D)	Phono jacks	2 Vrms (at 50 kilohms)	Over 10 kilohms
DIGITAL OUT (OPTICAL)	Optical output connector	–18 dBm	Wave length: 660 nm
DIGITAL OUT (COAXIAL)	Phono jack	0.5 Vp-p	75 ohms terminated
LINE OUT (VIDEO) (S325/S525D)	Phono jacks	1.0 Vp-p	75 ohms, sync negative
VIDEO OUT (1, 2) (S725D)	Phono jacks	1.0 Vp-p	75 ohms, sync negative
S VIDEO OUT (S325/S525D)	4-pin mini DIN	Y: 1.0 Vp-p	75 ohms, sync negative
S VIDEO OUT (1, 2) (S725D)		C: 0.3 Vp-p (PAL) C: 0.286 Vp-p (NTSC)	75 ohms terminated
COMPONENT VIDEO OUT (Y, CB/B-Y, CR/R-Y) (S725D)	phono jacks	Y: 1.0 Vp-p CB/B-Y, CR/R-Y: 0.7 Vp-p	75 ohms, sync negative 75 ohms
PHONES (EXCEPT S325)	Phone jack	12 mW	32 ohms
5.1CH OUTPUT (EXCEPT S325)	Phono jacks	2 Vrms (at 50 kilohms)	Over 10 kilohms

General

Power requirements 220 – 240 V AC, 50/60 Hz
Power consumption 16 W (S325)
17 W (S525D)
22 W (S725D)
Dimensions (approx.) 430 × 95 × 305 mm (w/h/d) incl. projecting parts
Mass (approx.) 3.3 kg (S325)
3.4 kg (S525D)
4.0 kg (S725D)
Operating temperature 5°C to 35°C

– Continued on next page –

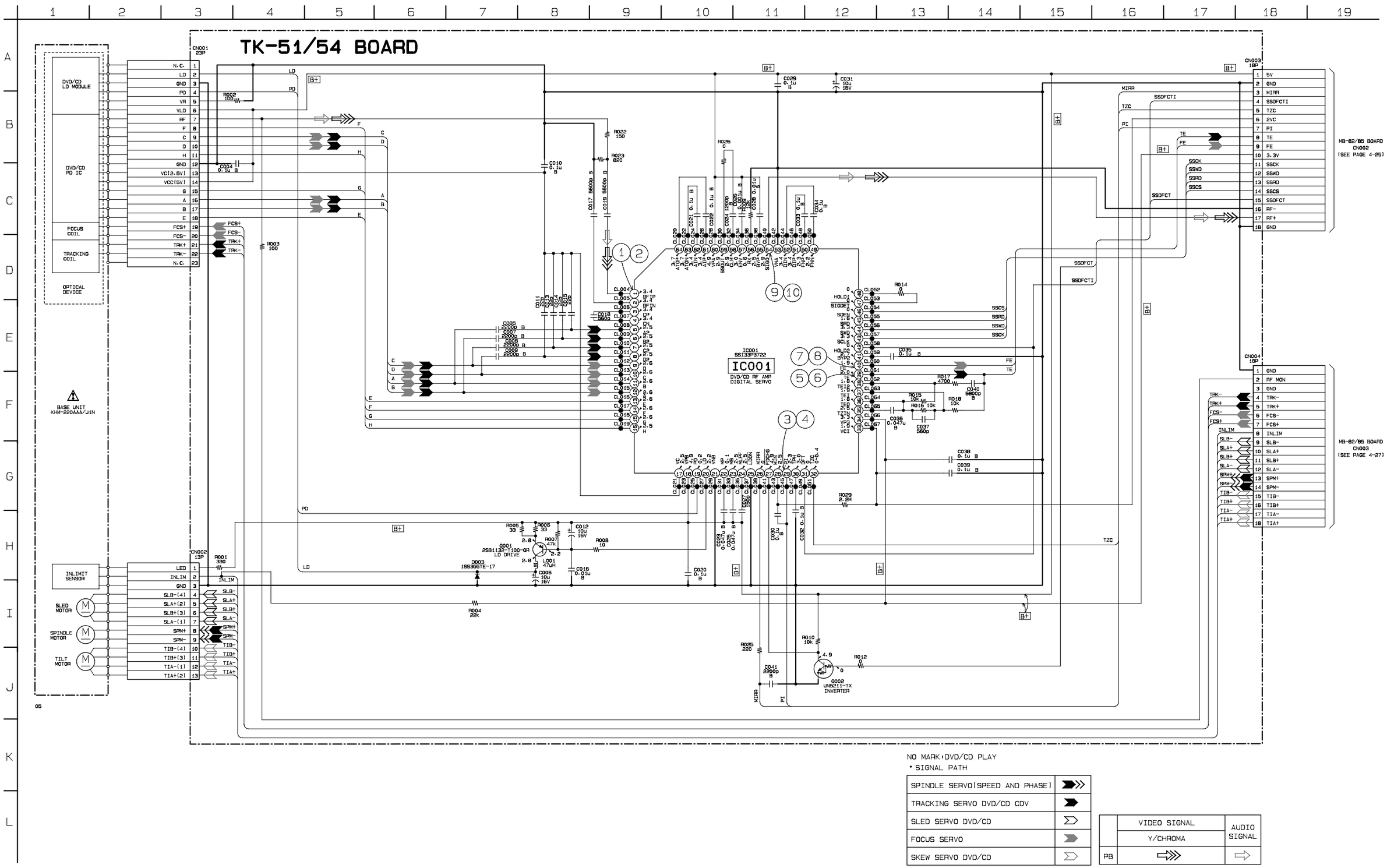
DVD VIDEO COMPACT disc DIGITAL VIDEO **CD/DVD PLAYER**

MICROFILM

SONY®

TK-51/54 (RF/SERVO) SCHEMATIC DIAGRAM • **See page 4-9 for printed wiring board and page 4-12 for waveforms.**

– Ref. No.: TK-51/54 board; 2,000 series –

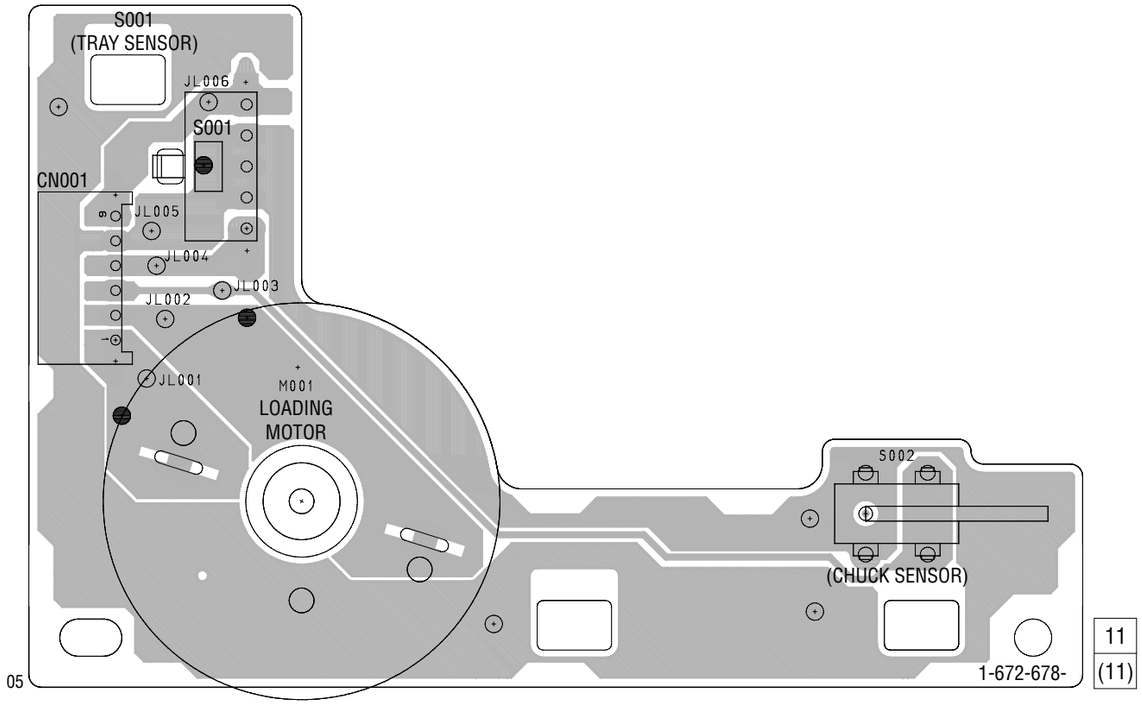


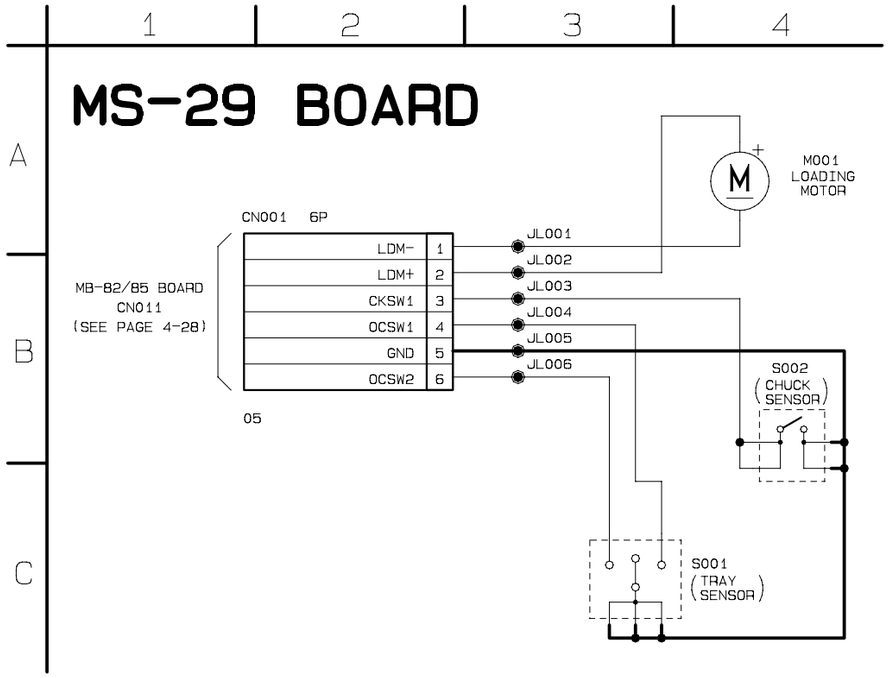
Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

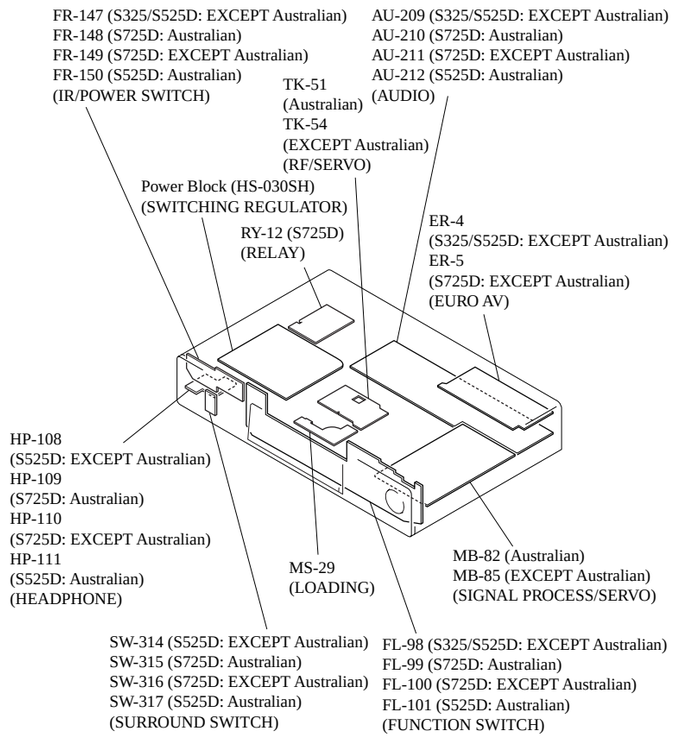
MS-29 (LOADING) PRINTED WIRING BOARD AND SCHEMATIC DIAGRAM
– Ref. No.: MS-29 board; 3,000 series –

There are few cases that the part isn't mounted in this model is printed on this diagram.

MS-29 BOARD

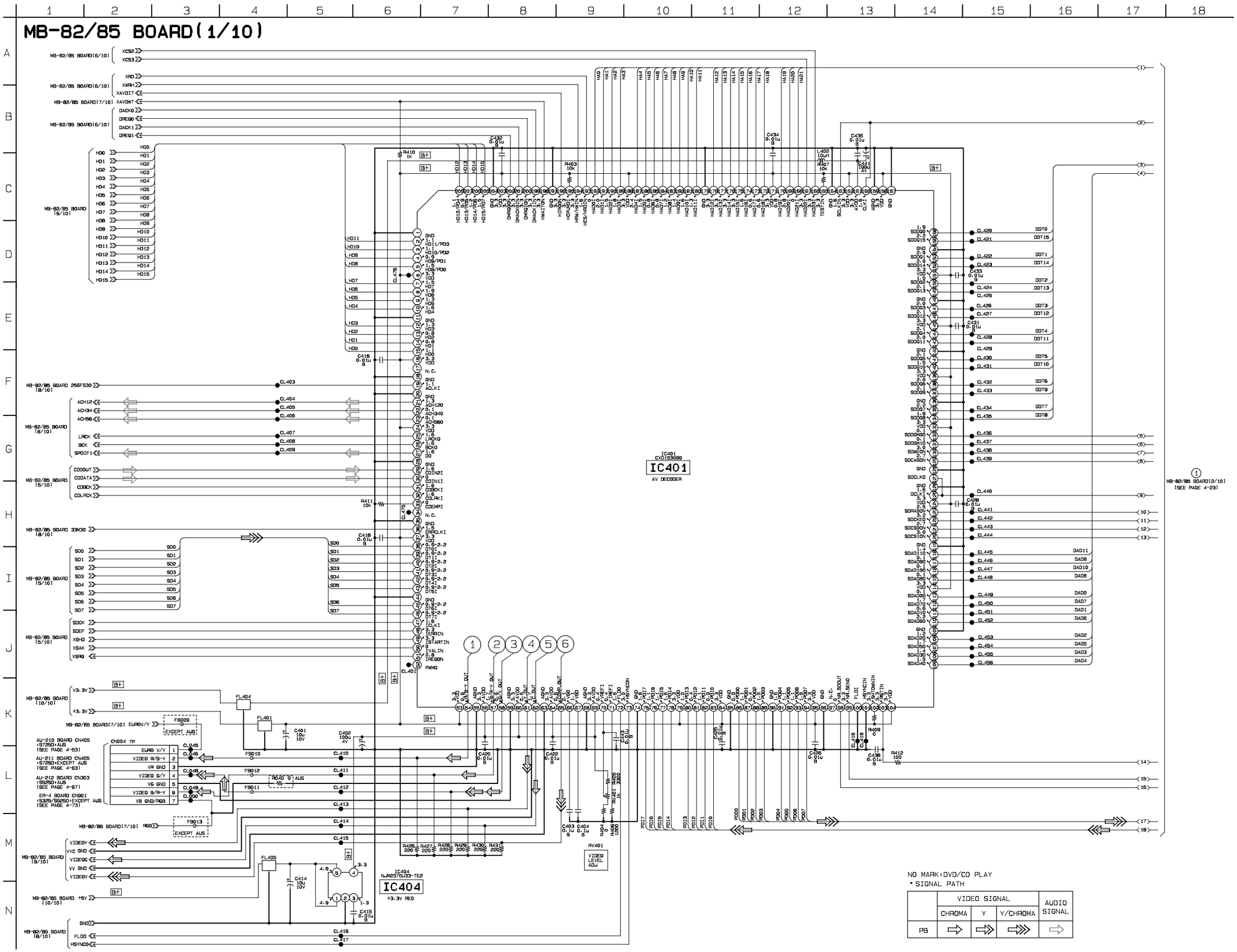






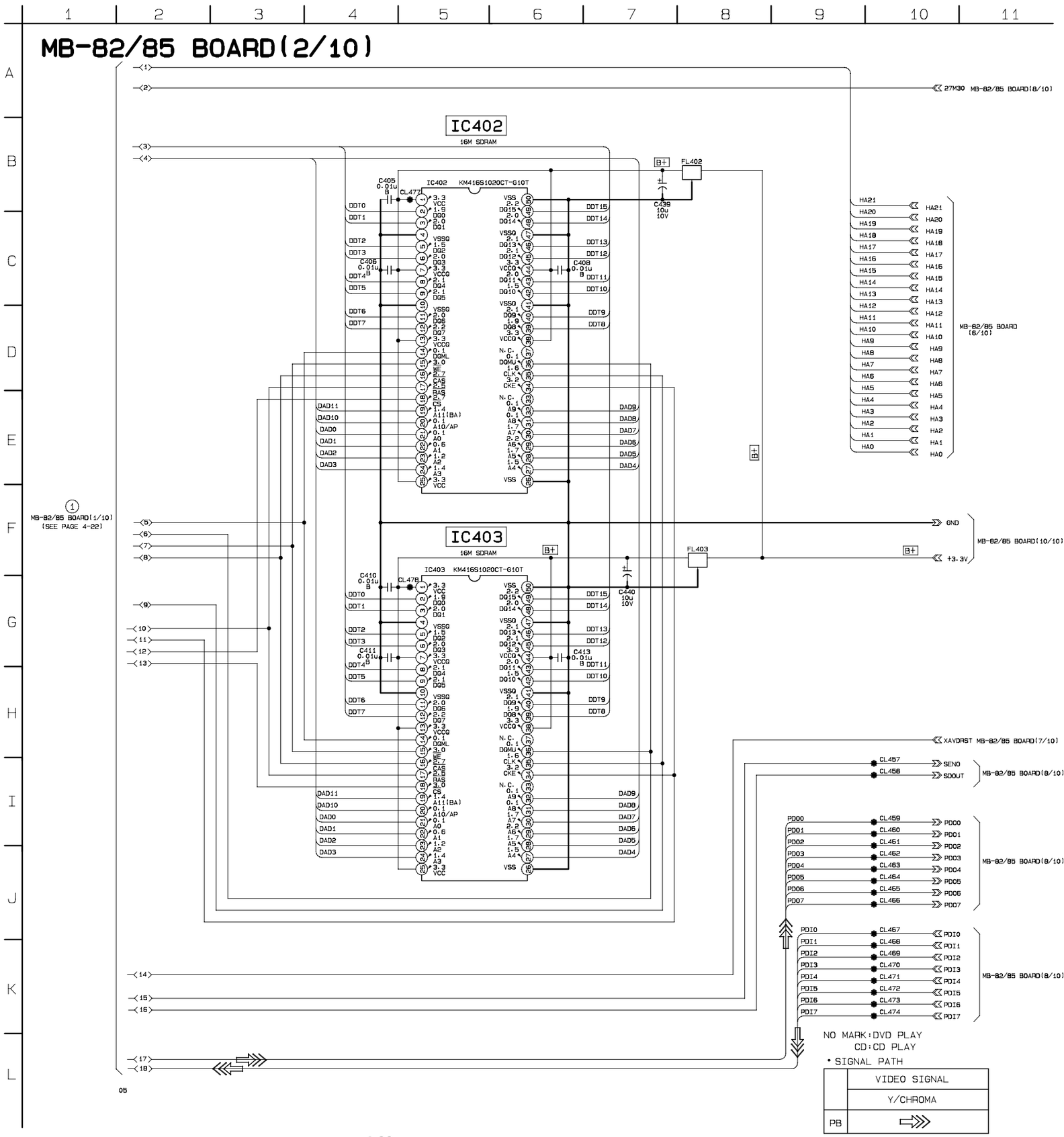
MB-82/85 (AV DECODER) SCHEMATIC DIAGRAM • See page 4-17 for printed wiring board.

– Ref. No.: MB-82/85 board; 1,000 series –



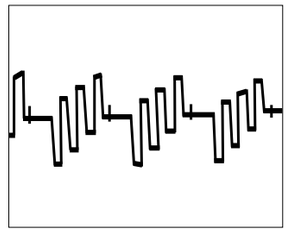
MB-82/85 (SDRAM) SCHEMATIC DIAGRAM **• See page 4-17 for printed wiring board.**

– Ref. No.: MB-82/85 board; 1,000 series –



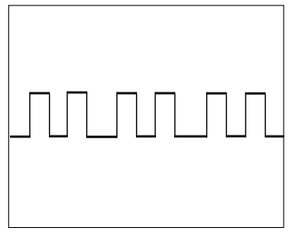
• Waveforms

❶ IC401 ㊿④



720 mVp-p (H)

❶ IC401 ㊿④ (RGB output model)

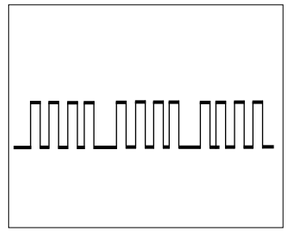


720 mVp-p (H)

❷ IC401 ㊿⑦

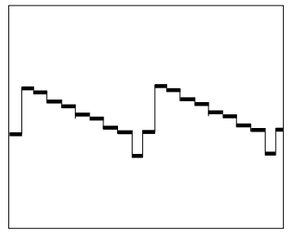
728 mVp-p (H)

❷ IC401 ㊿⑦ (RGB output model)



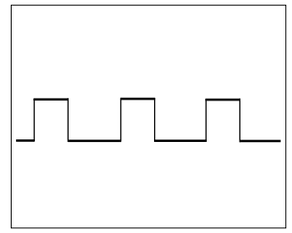
728 mVp-p (H)

❸ IC401 ㊽



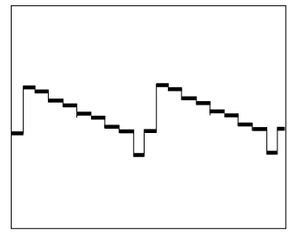
1.0 Vp-p (H)

❸ IC401 ㊽ (RGB output model)



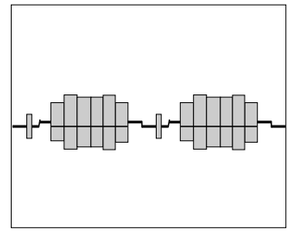
1.0 Vp-p (H)

❹ IC401 ㊶



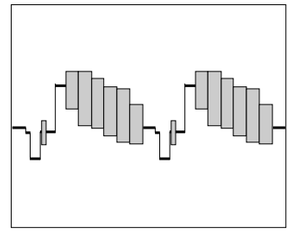
1.1 Vp-p (H)

❺ IC401 ㊷



816 mVp-p (H)

❻ IC401 ㊺



1.2 Vp-p (H)

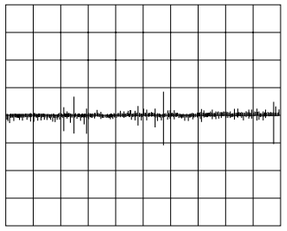
SDRAM
MB-82/85 (2/10)

MB-82/85 (SERVO DSP) SCHEMATIC DIAGRAM • See page 4-17 for printed wiring board.

– Ref. No.: MB-82/85 board; 1,000 series –

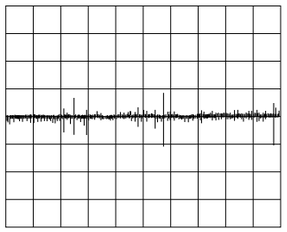
• **Waveforms**

❶ IC701 ㊾ (DVD play)
500 mV/DIV 50 ms/DIV



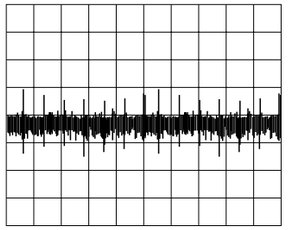
1.4 Vp-p

❷ IC701 ㊾ (CD play)
500 mV/DIV 200 mV/DIV



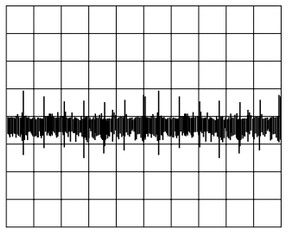
1.7 Vp-p

❸ IC701 ㊽ (DVD play)
100 mV/DIV 5 ms/DIV

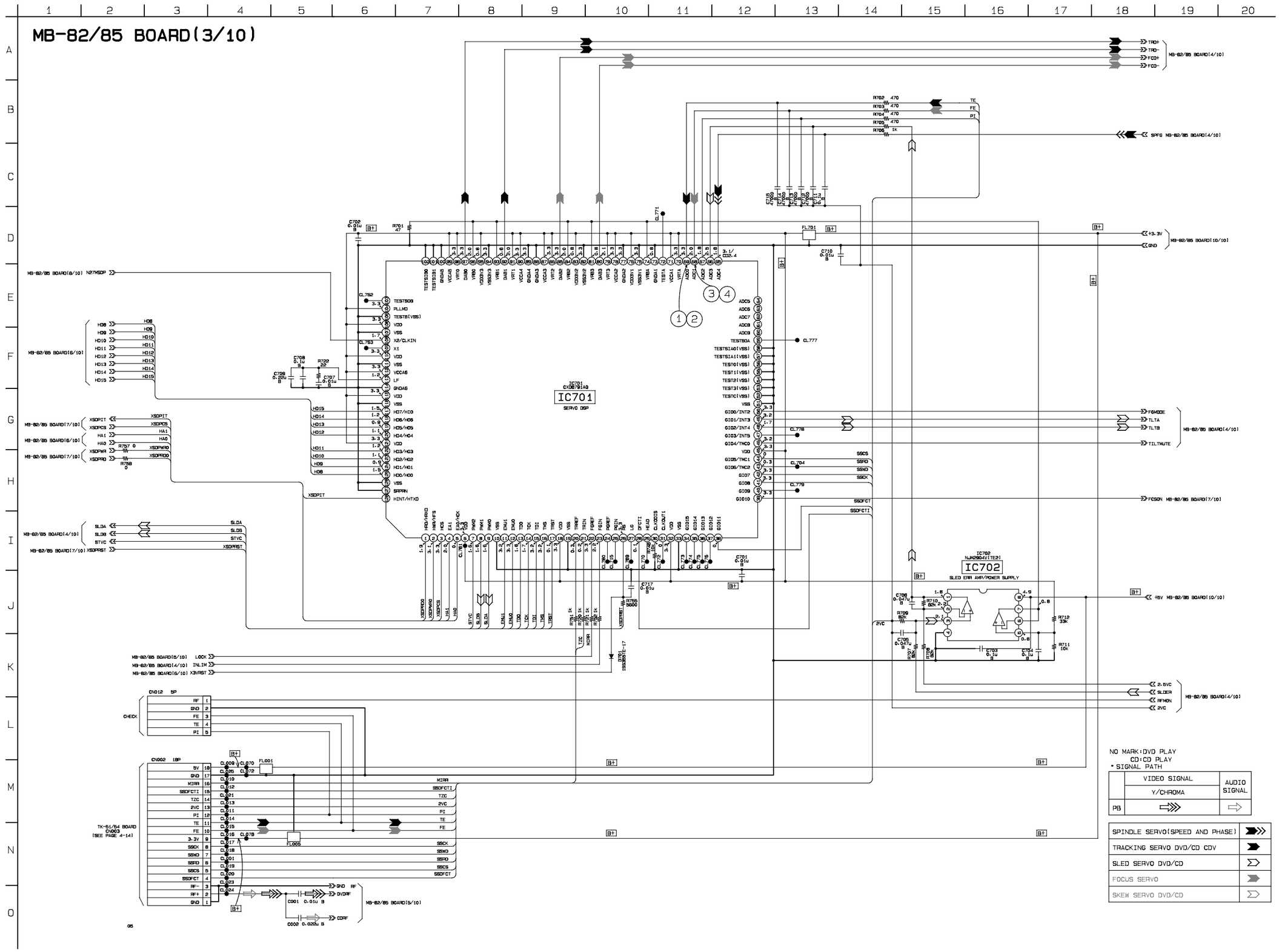


180 mVp-p

❹ IC701 ㊽ (CD play)
500 mV/DIV 50 ms/DIV



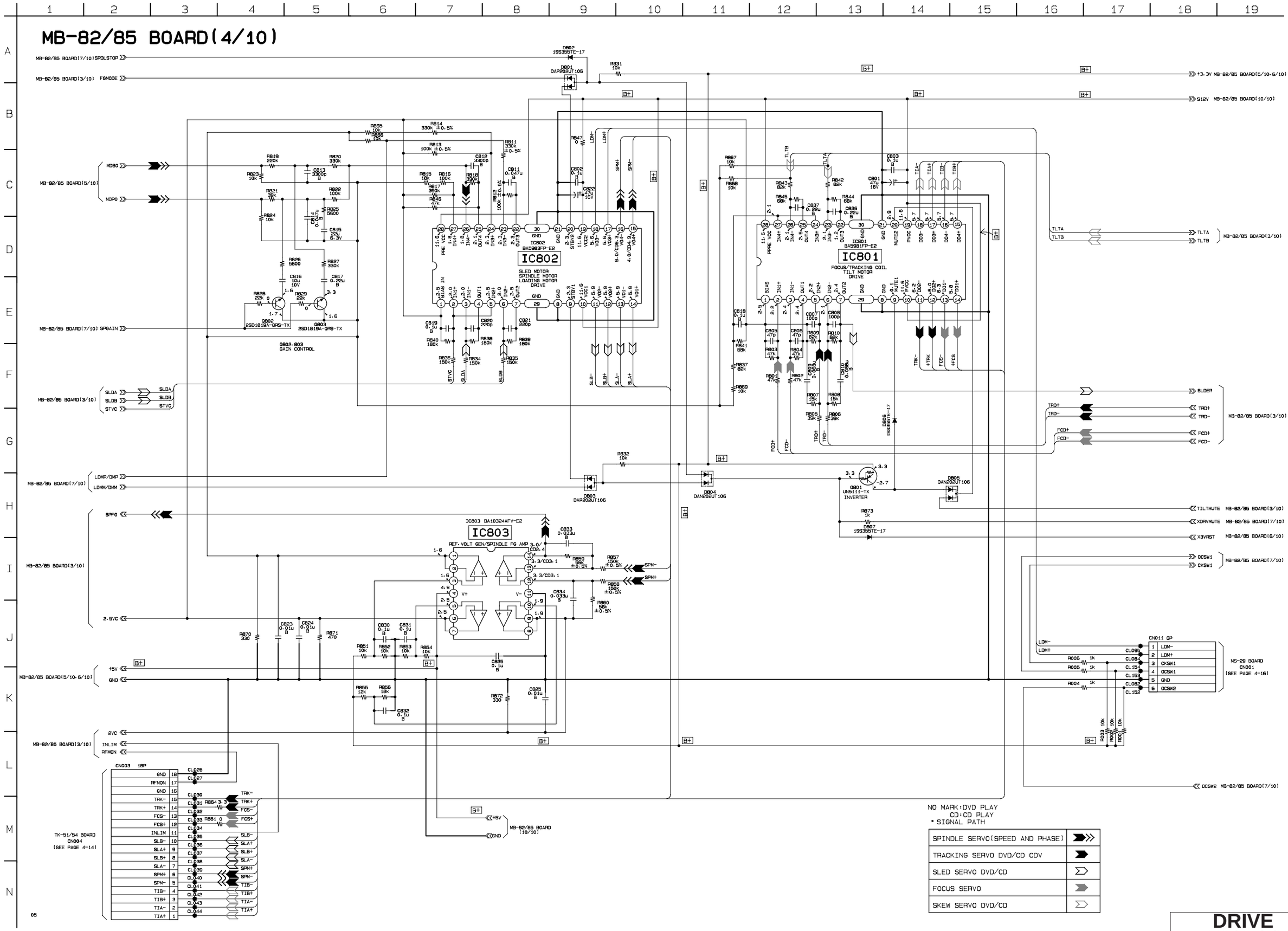
860 mVp-p



SERVO DSP
MB-82/85 (3/10)

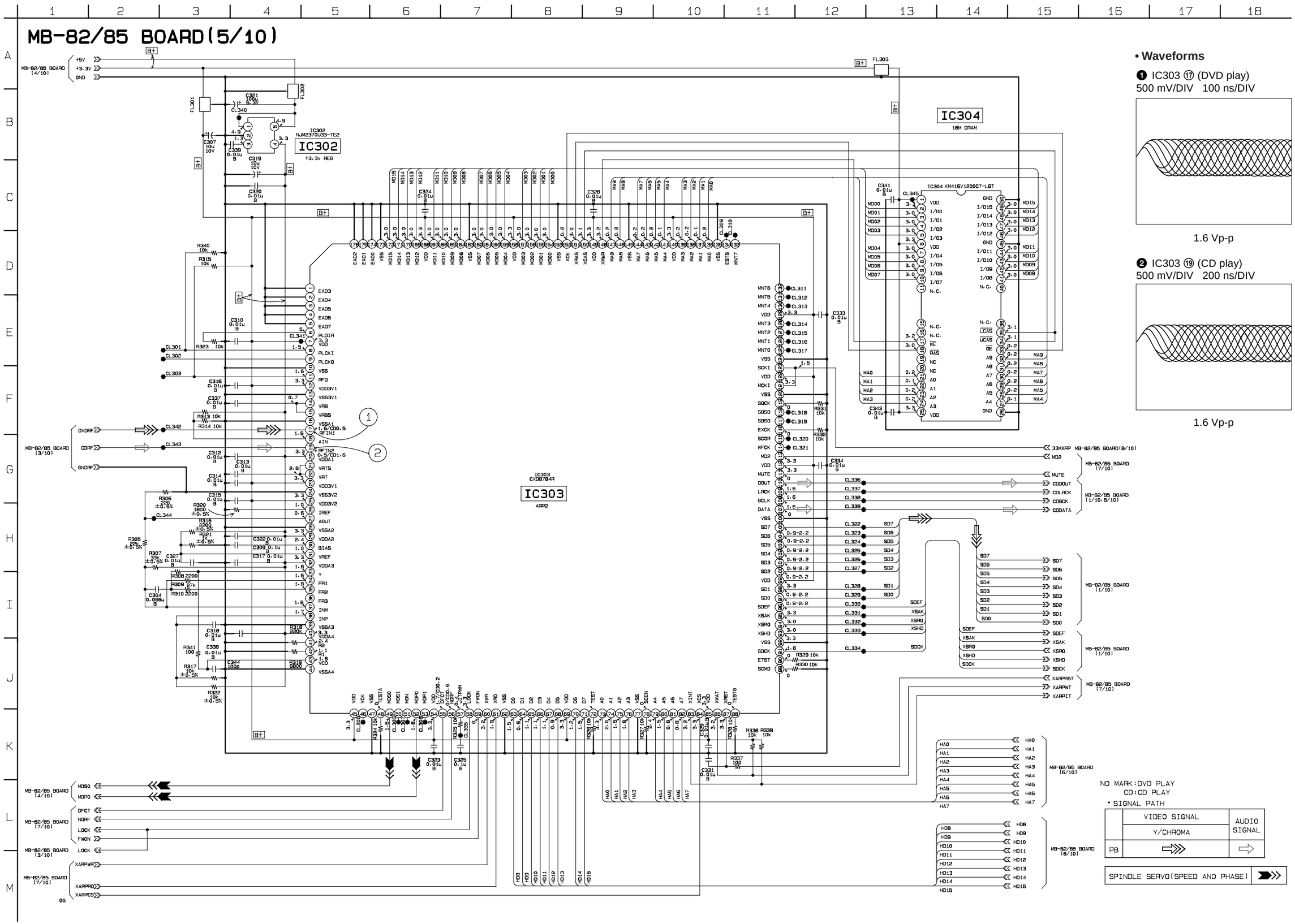
MB-82/85 (DRIVE) SCHEMATIC DIAGRAM **• See page 4-17 for printed wiring board.**

– Ref. No.: MB-82/85 board; 1,000 series –



MB-82/85 (ARP) SCHEMATIC DIAGRAM **• See page 4-17 for printed wiring board.**

– Ref. No.: MB-82/85 board; 1,000 series –



• Waveforms

❶ IC303 ⑰ (DVD play)
500 mV/DIV 100 ns/DIV

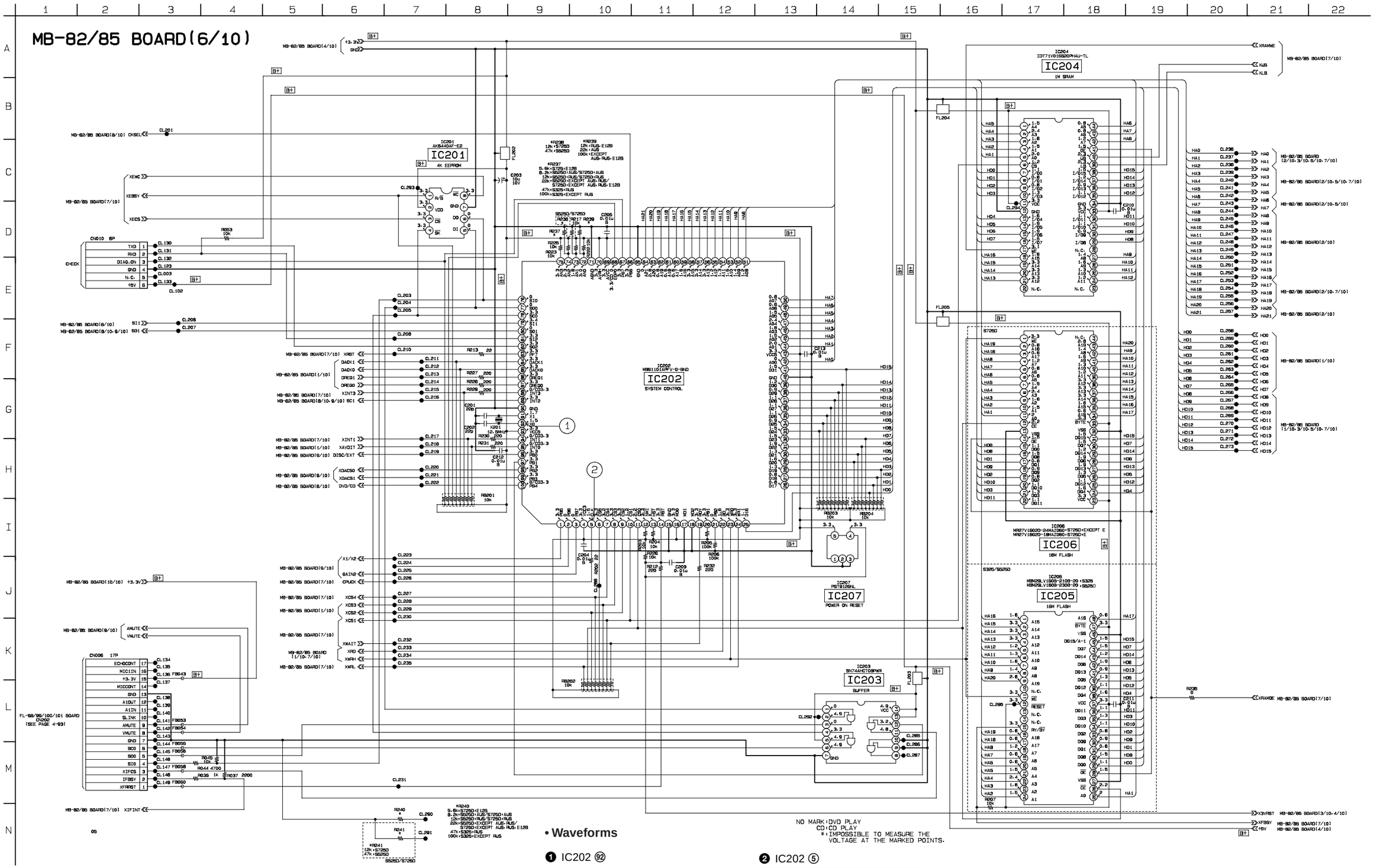
1.6 Vp-p

❷ IC303 ⑲ (CD play)
500 mV/DIV 200 ns/DIV

1.6 Vp-p

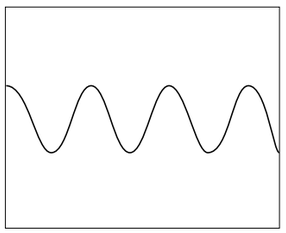
MB-82/85 (SYSTEM CONTROL) SCHEMATIC DIAGRAM • See page 4-17 for printed wiring board.

– Ref. No.: MB-82/85 board; 1,000 series –



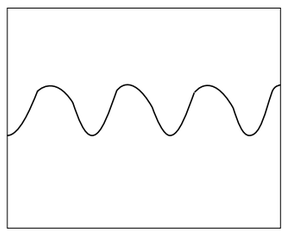
• **Waveforms**

❶ IC202 ⑫



2.4 Vp-p (12.5 MHz)

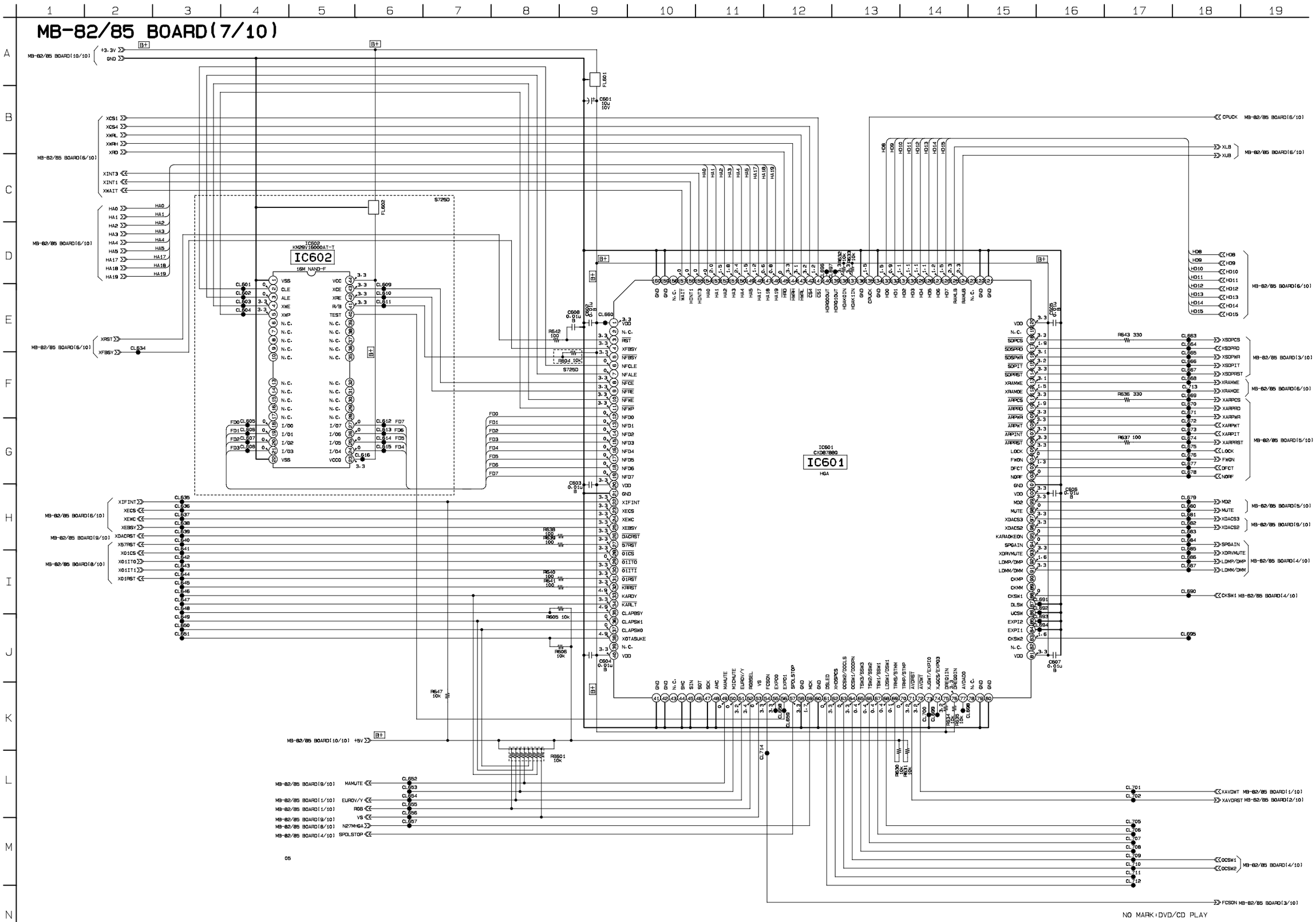
❷ IC202 ⑤



4 Vp-p (25.3 MHz)

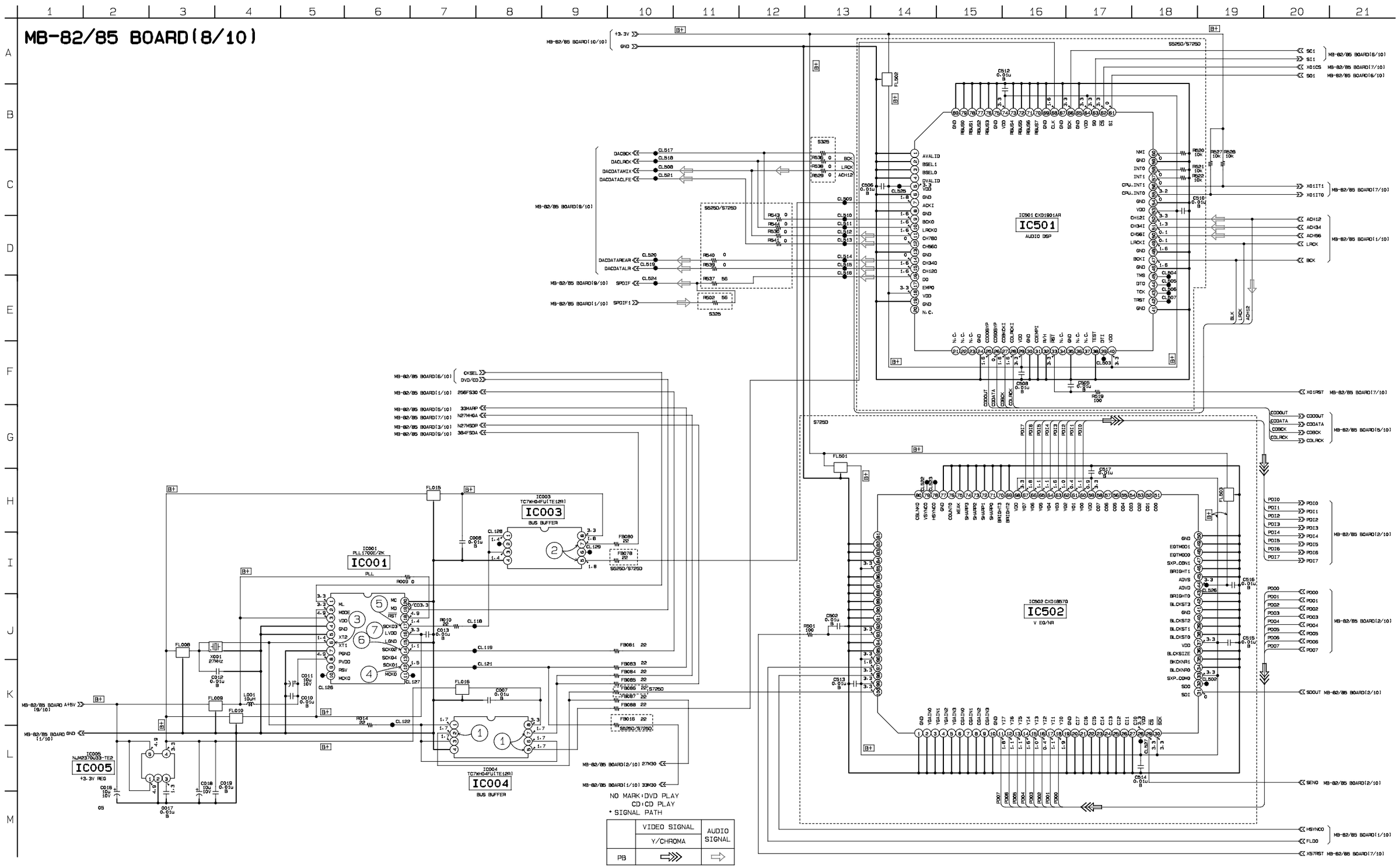
MB-82/85 (HGA) SCHEMATIC DIAGRAM **• See page 4-17 for printed wiring board.**

– Ref. No.: MB-82/85 board; 1,000 series –



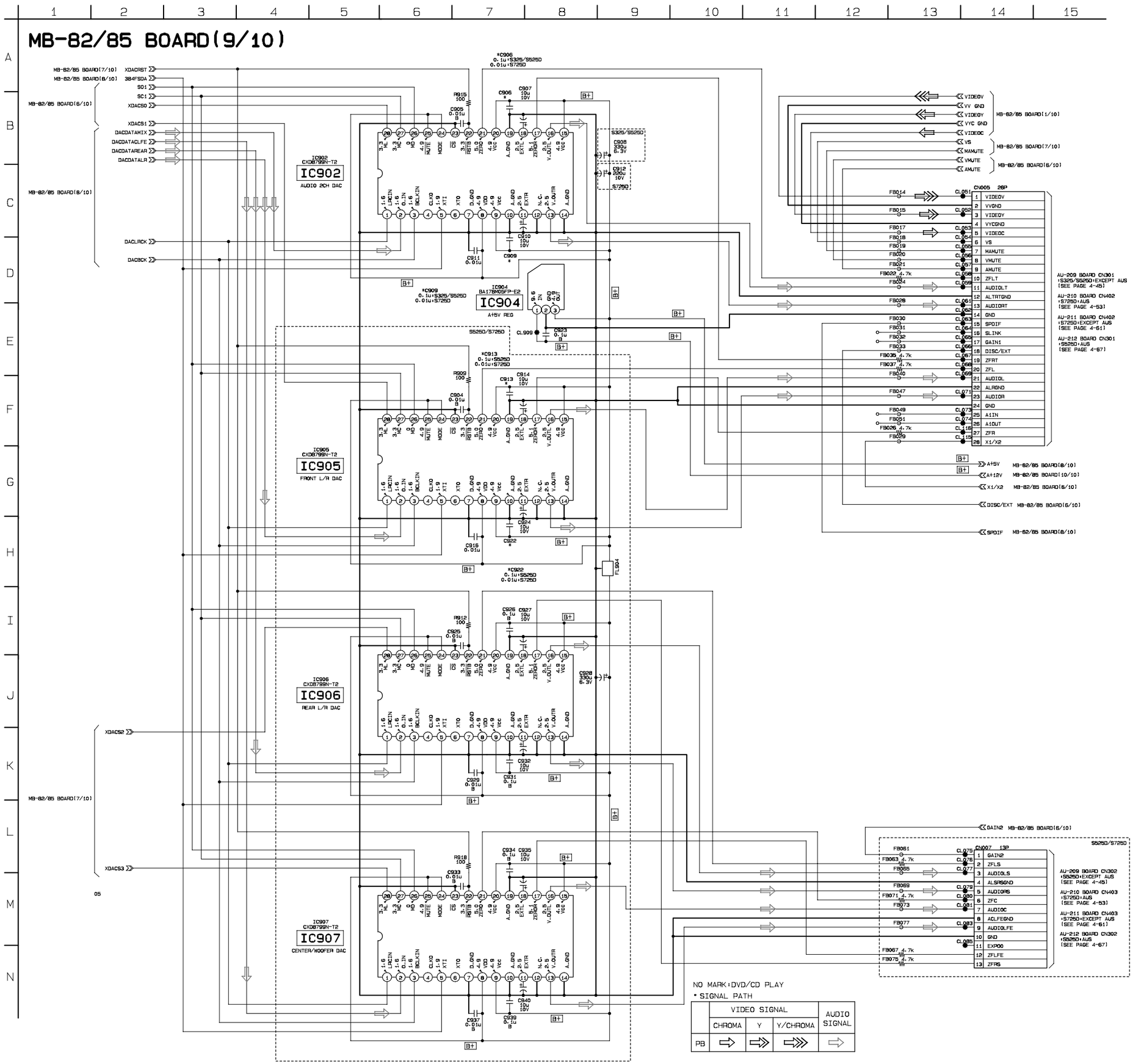
MB-82/85 (CLOCK GENERATOR, AUDIO DSP, V EQ/NR) SCHEMATIC DIAGRAM • **See page 4-17 for printed wiring board and page 4-40 for waveforms.**

– Ref. No.: MB-82/85 board; 1,000 series –



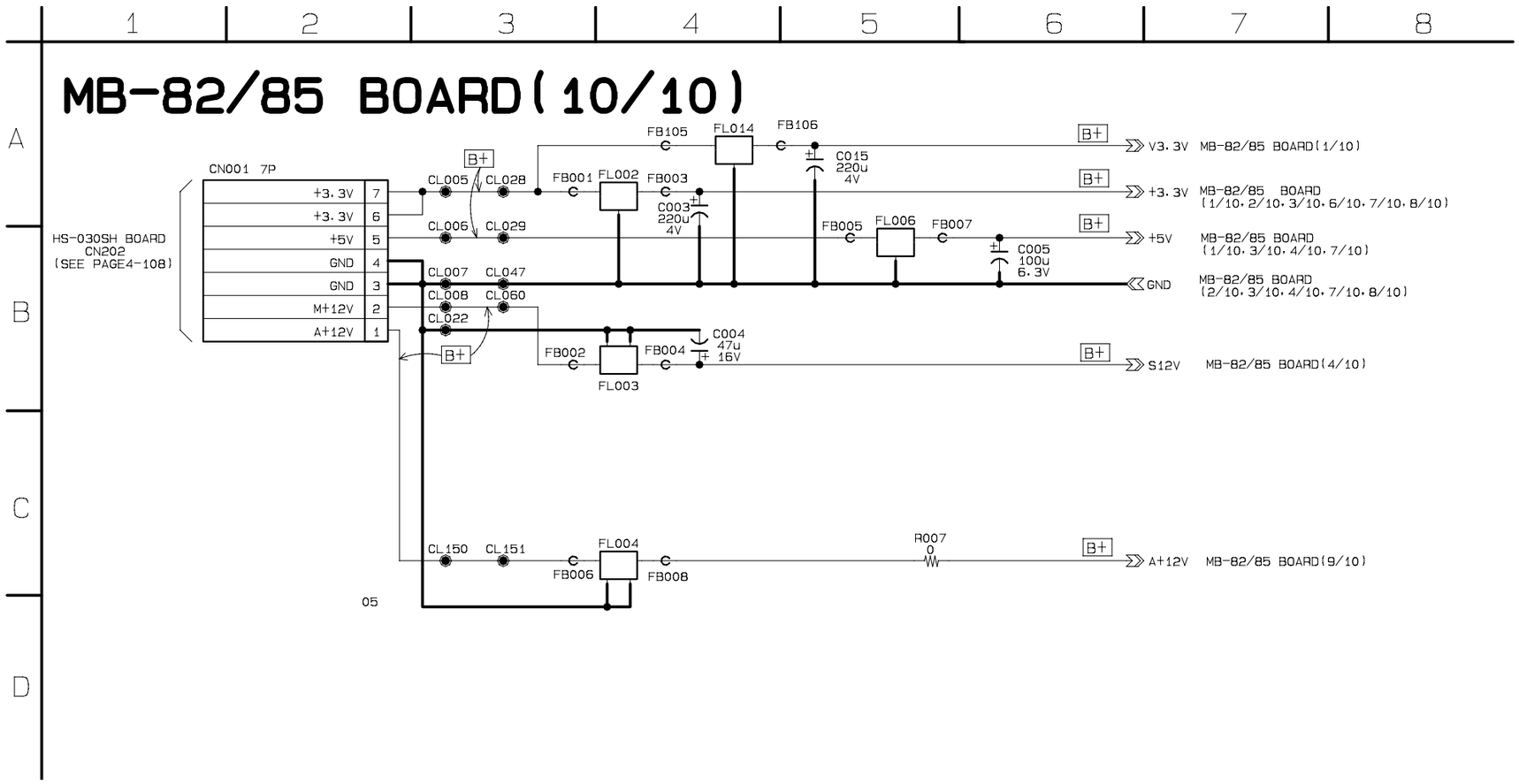
MB-82/85 (DAC) SCHEMATIC DIAGRAM • See page 4-17 for printed wiring board.

– Ref. No.: MB-82/85 board; 1,000 series –



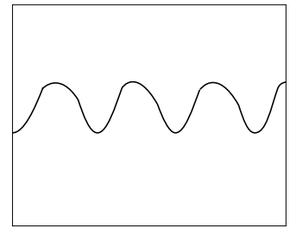
MB-82/85 (BIAS) SCHEMATIC DIAGRAM **• See page 4-17 for printed wiring board.**

– Ref. No.: MB-82/85 board; 1,000 series –



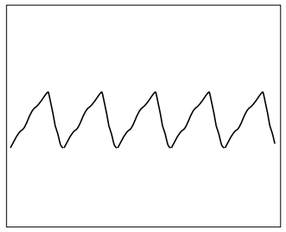
• Waveforms

❶ IC004 ②, ⑤, ⑦



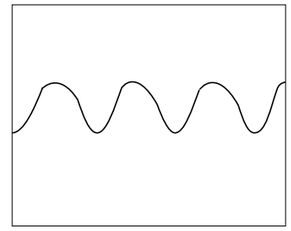
4.2 Vp-p (26.9 MHz)

❻ IC001 ⑭ (DVD play)



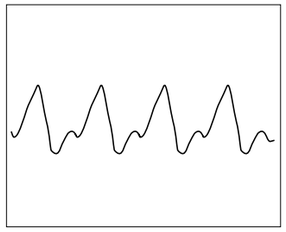
4.2 Vp-p (25.3 MHz)

❷ IC003 ⑤, ⑦



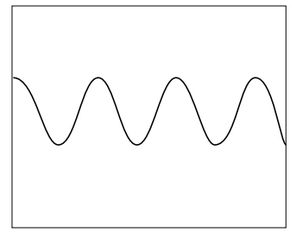
DVD: 6.2 Vp-p (37.0 MHz)
CD : 5 Vp-p (33.6 MHz)

❼ IC001 ⑭ (CD play)



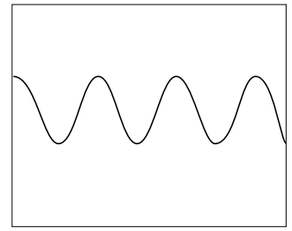
4.7 Vp-p (22.5 MHz)

❸ IC001 ⑥



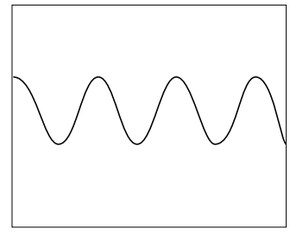
4.2 Vp-p (27.0 MHz)

❹ IC001 ⑫



4.6 Vp-p (33.8 MHz)

❺ IC001 ⑰

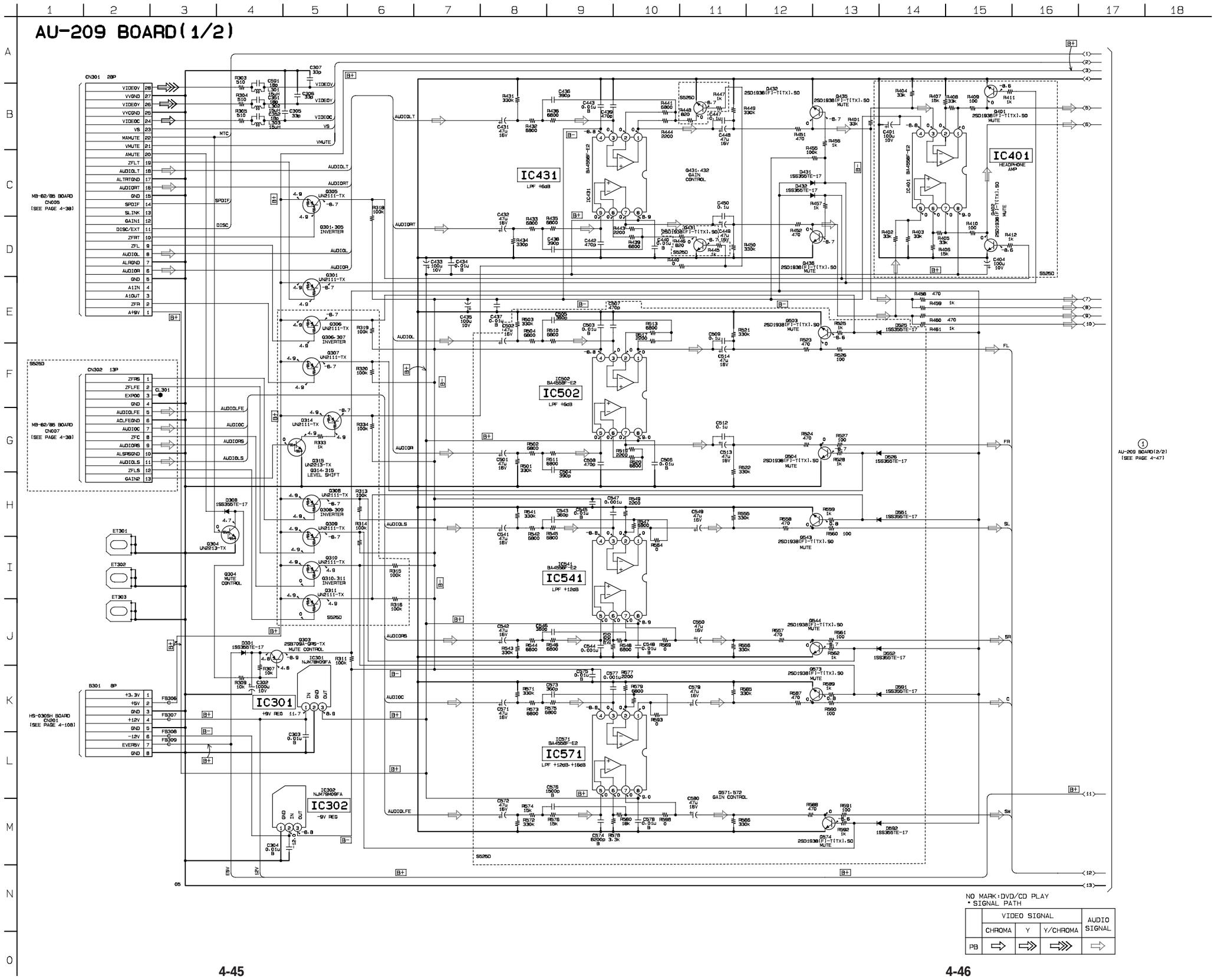


DVD: 5.8 Vp-p (36.5 MHz)
CD : 5.1 Vp-p (33.8 MHz)

AU-209 (AUDIO) SCHEMATIC DIAGRAM **• See page 4-43 for printed wiring board.**

– Ref. No.: AU-209 board; 2,000 series –

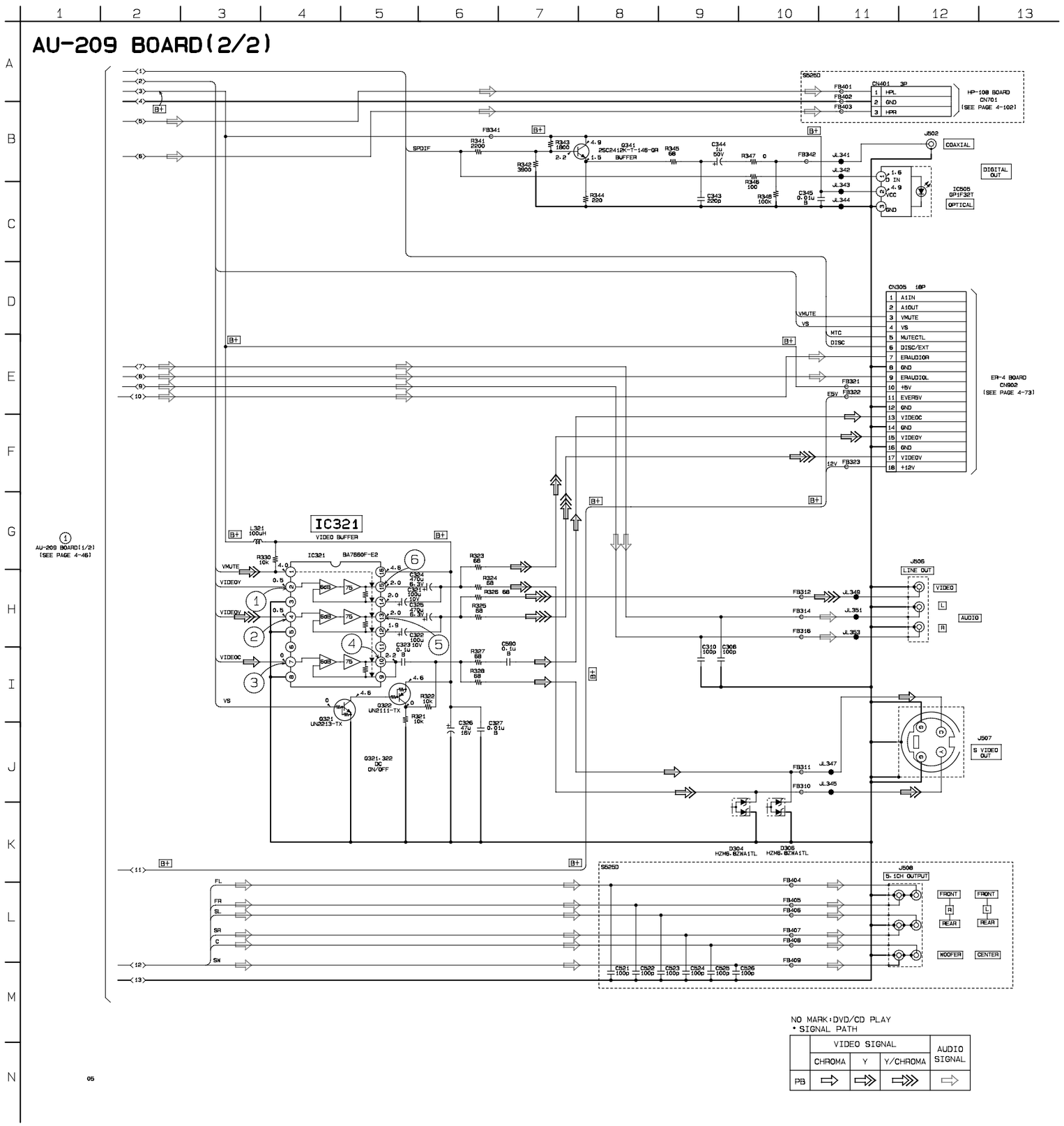
– DVP-S325/S525D: EXCEPT AUS –



AU-209 (VIDEO BUFFER) SCHEMATIC DIAGRAM **• See page 4-43 for printed wiring board.**

– Ref. No.: AU-209 board; 2,000 series –

– DVP-S325/S525D: EXCEPT AUS –

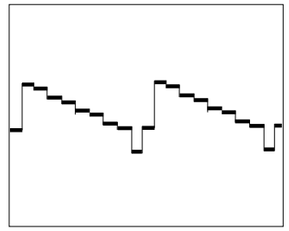


NO MARK:DVD/CD PLAY
• SIGNAL PATH

	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA	
PB	⇨	⇨	⇨	⇨

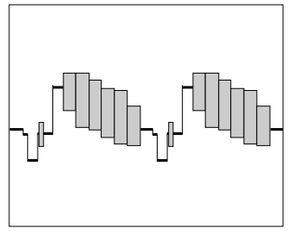
• Waveforms

❶ IC321 ②



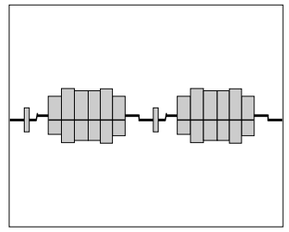
1.1 Vp-p (H)

❷ IC321 ④



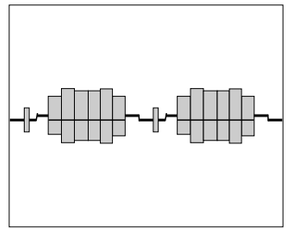
1.2 Vp-p (H)

❸ IC321 ⑦



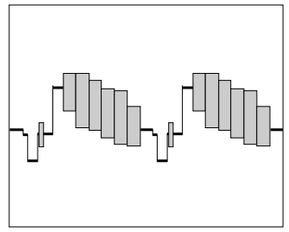
860 mVp-p (H)

❹ IC321 ⑩



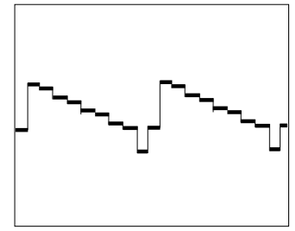
1.8 Vp-p (H)

❺ IC321 ⑬



2.4 Vp-p (H)

❻ IC321 ⑮

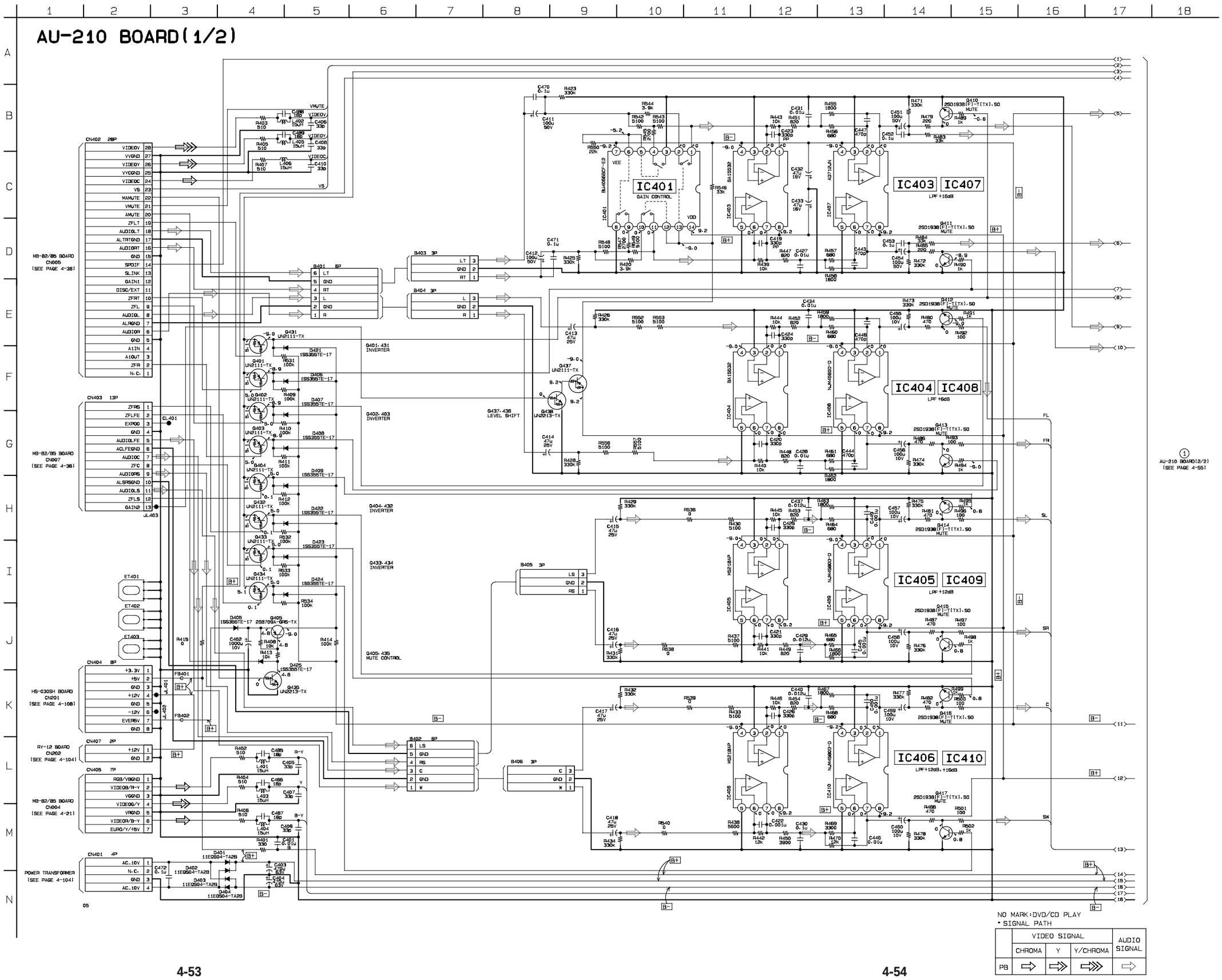


2.0 Vp-p (H)

AU-210 (AUDIO) SCHEMATIC DIAGRAM **• See page 4-49 for printed wiring board.**

– Ref. No.: AU-210 board; 3,000 series –

– DVP-S725D: AUS –

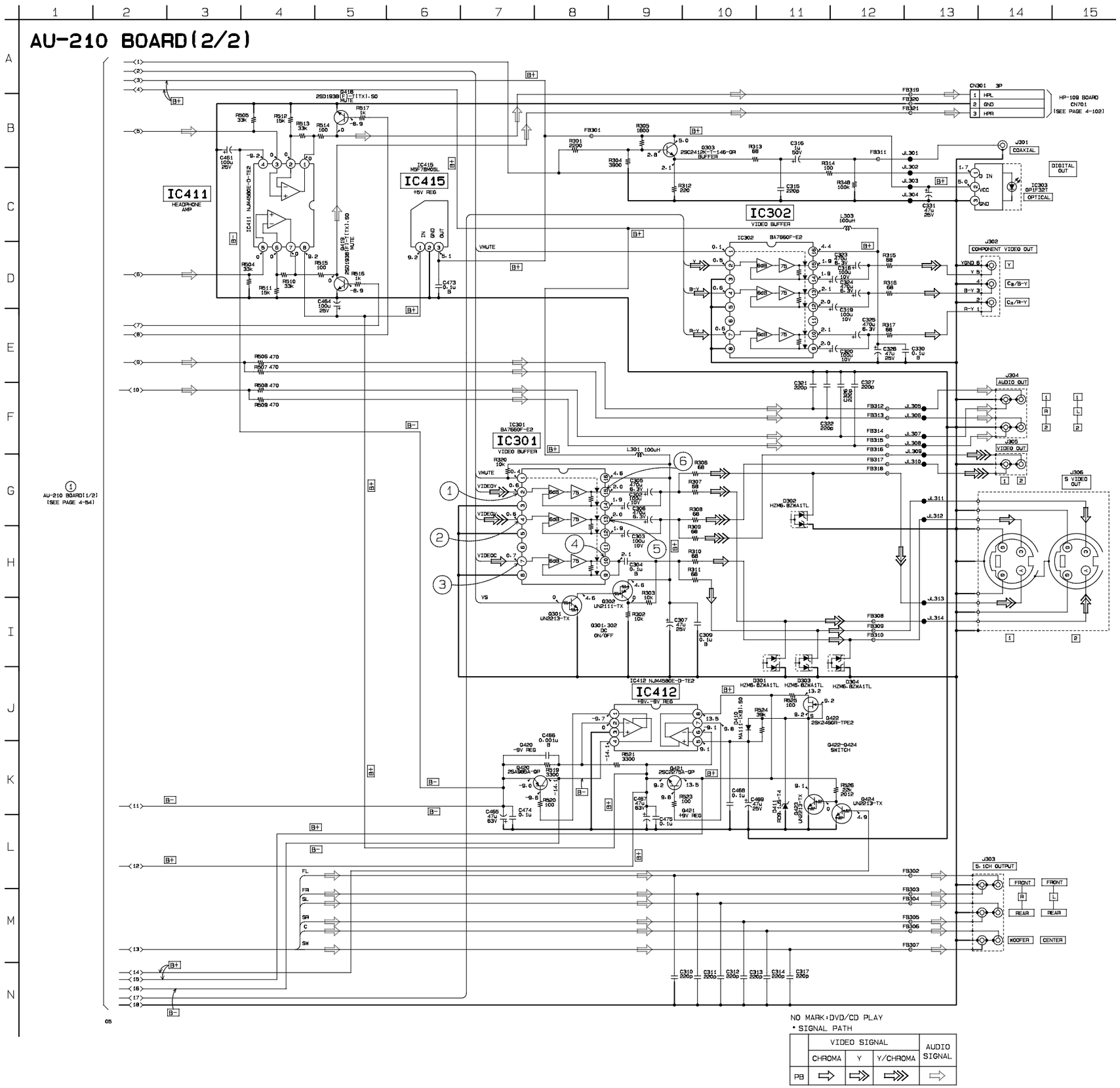


AUDIO
AU-210 (1/2)

AU-210 (VIDEO BUFFER) SCHEMATIC DIAGRAM **• See page 4-49 for printed wiring board.**

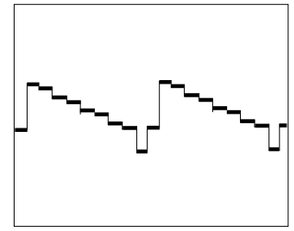
– Ref. No.: AU-210 board; 3,000 series –

– DVP-S725D: AUS –



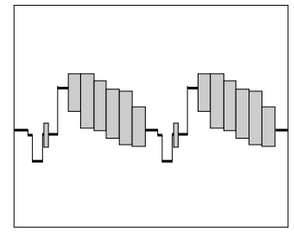
• Waveforms

❶ IC301 ②



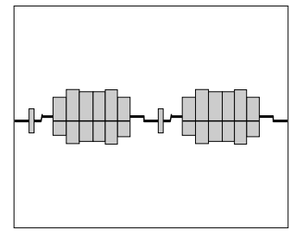
1.1 Vp-p (H)

❷ IC301 ④



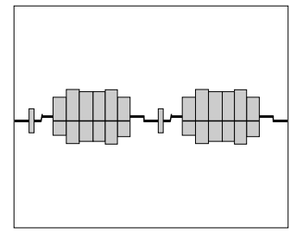
1.2 Vp-p (H)

❸ IC301 ⑦



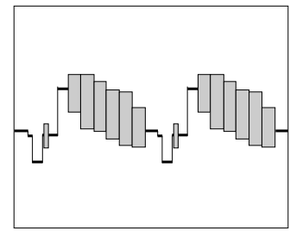
860 mVp-p (H)

❹ IC301 ⑩



1.8 Vp-p (H)

❺ IC301 ⑬



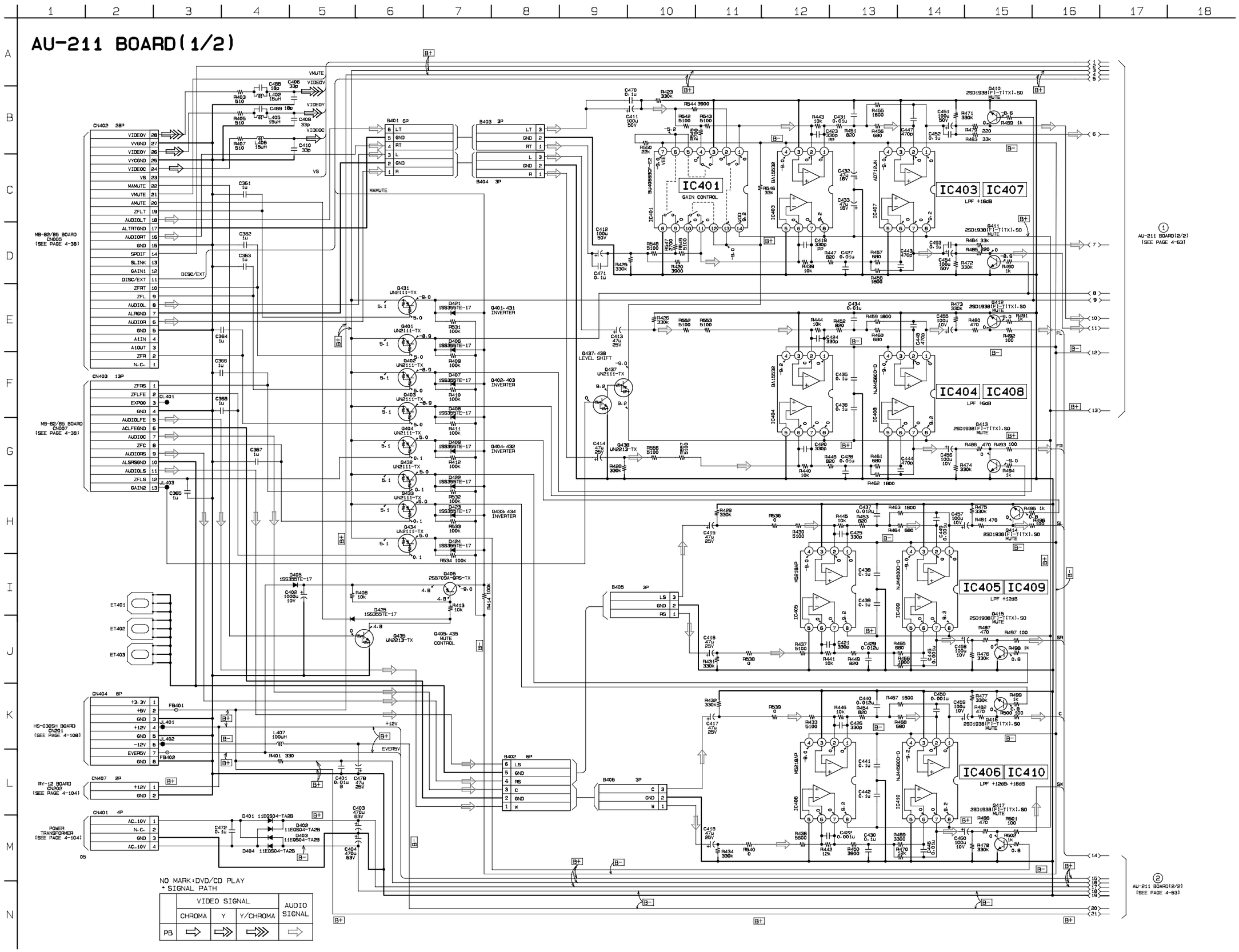
2.4 Vp-p (H)

VIDEO BUFFER
AU-210 (2/2)

AU-211 (AUDIO) SCHEMATIC DIAGRAM • See page 4-57 for printed wiring board.

– Ref. No.: AU-211 board; 3,000 series –

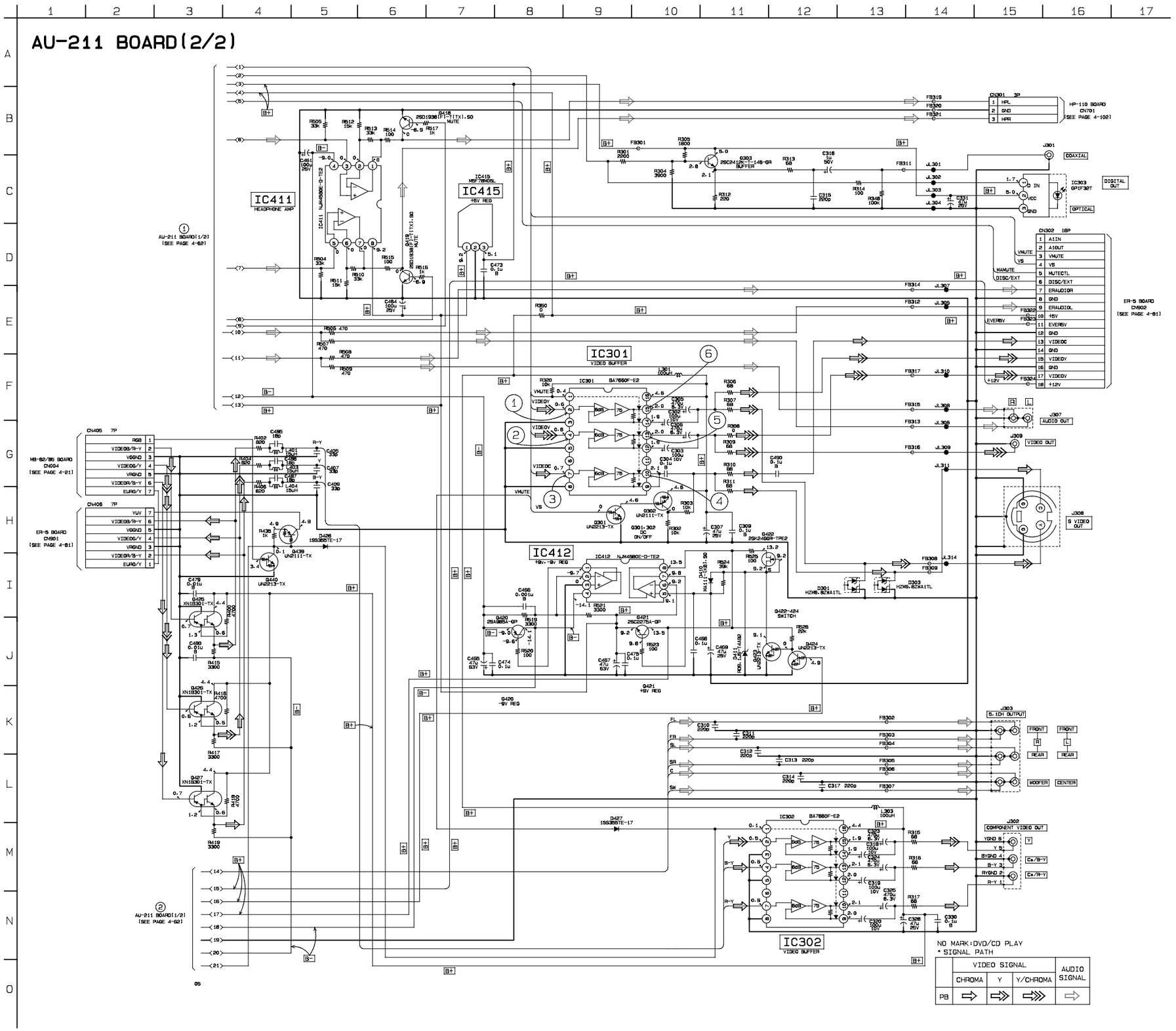
– DVP-S725D: EXCEPT AUS –



AU-211 (VIDEO BUFFER) SCHEMATIC DIAGRAM **• See page 4-57 for printed wiring board.**

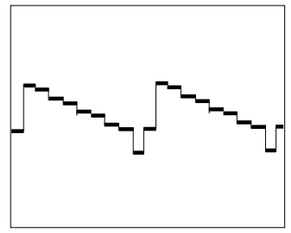
– Ref. No.: AU-211 board; 3,000 series –

– DVP-S725D: EXCEPT AUS –



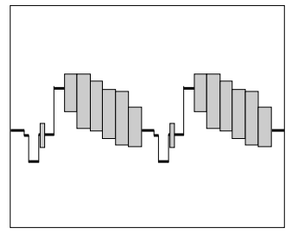
• Waveforms

❶ IC301 ②



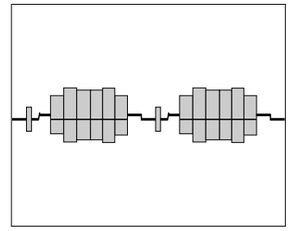
1.1 Vp-p (H)

❷ IC301 ④



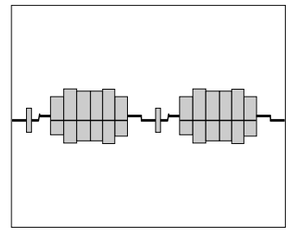
1.2 Vp-p (H)

❸ IC301 ⑦



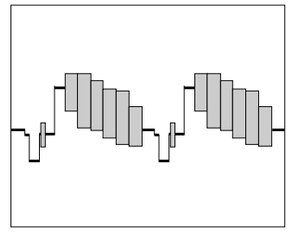
860 mVp-p (H)

❹ IC301 ⑩



1.8 Vp-p (H)

❺ IC301 ⑬



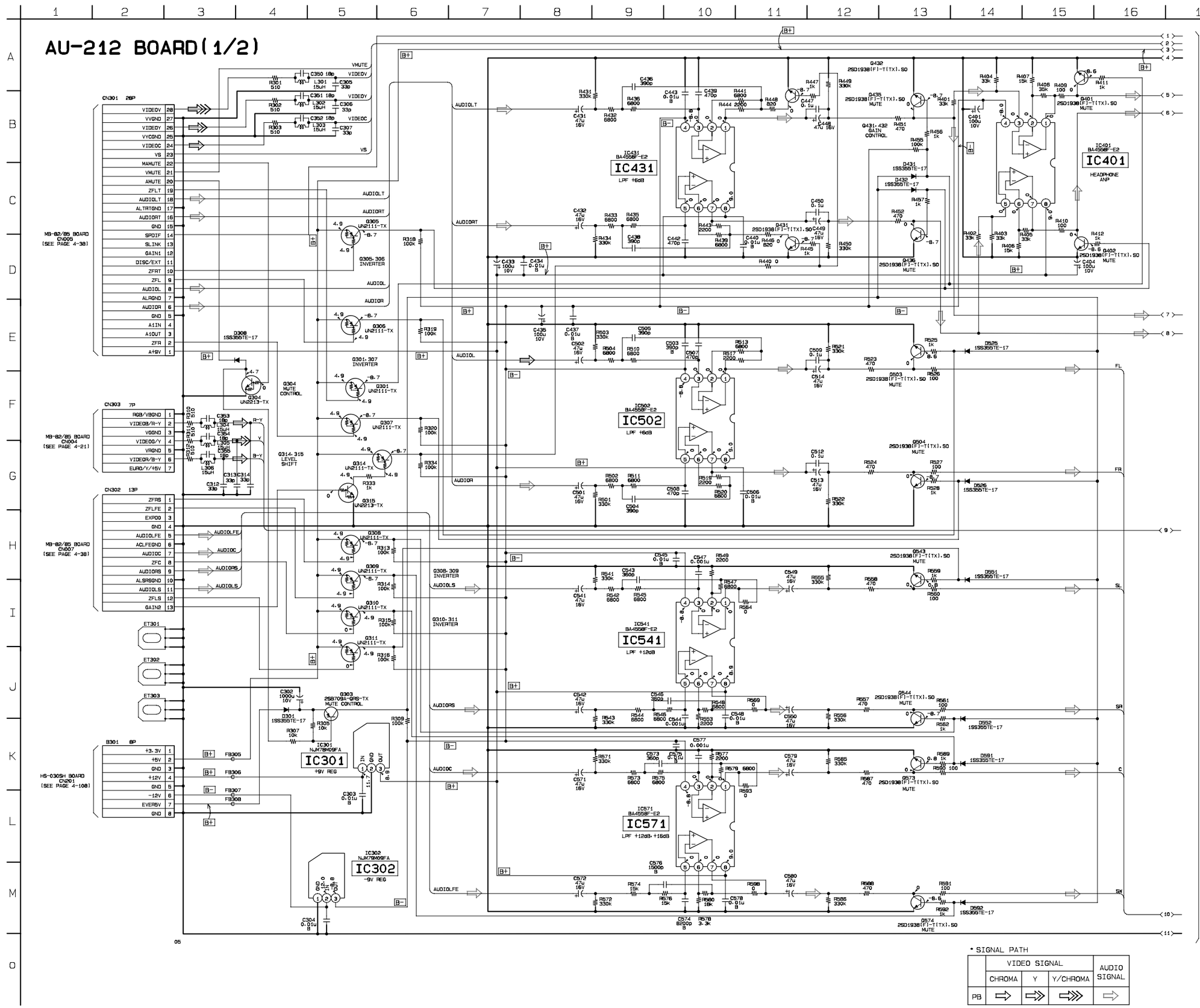
2.4 Vp-p (H)

VIDEO BUFFER
AU-211 (2/2)

AU-212 (AUDIO) SCHEMATIC DIAGRAM

– Ref. No.: AU-212 board; 2,000 series –

– DVP-S525D: AUS –



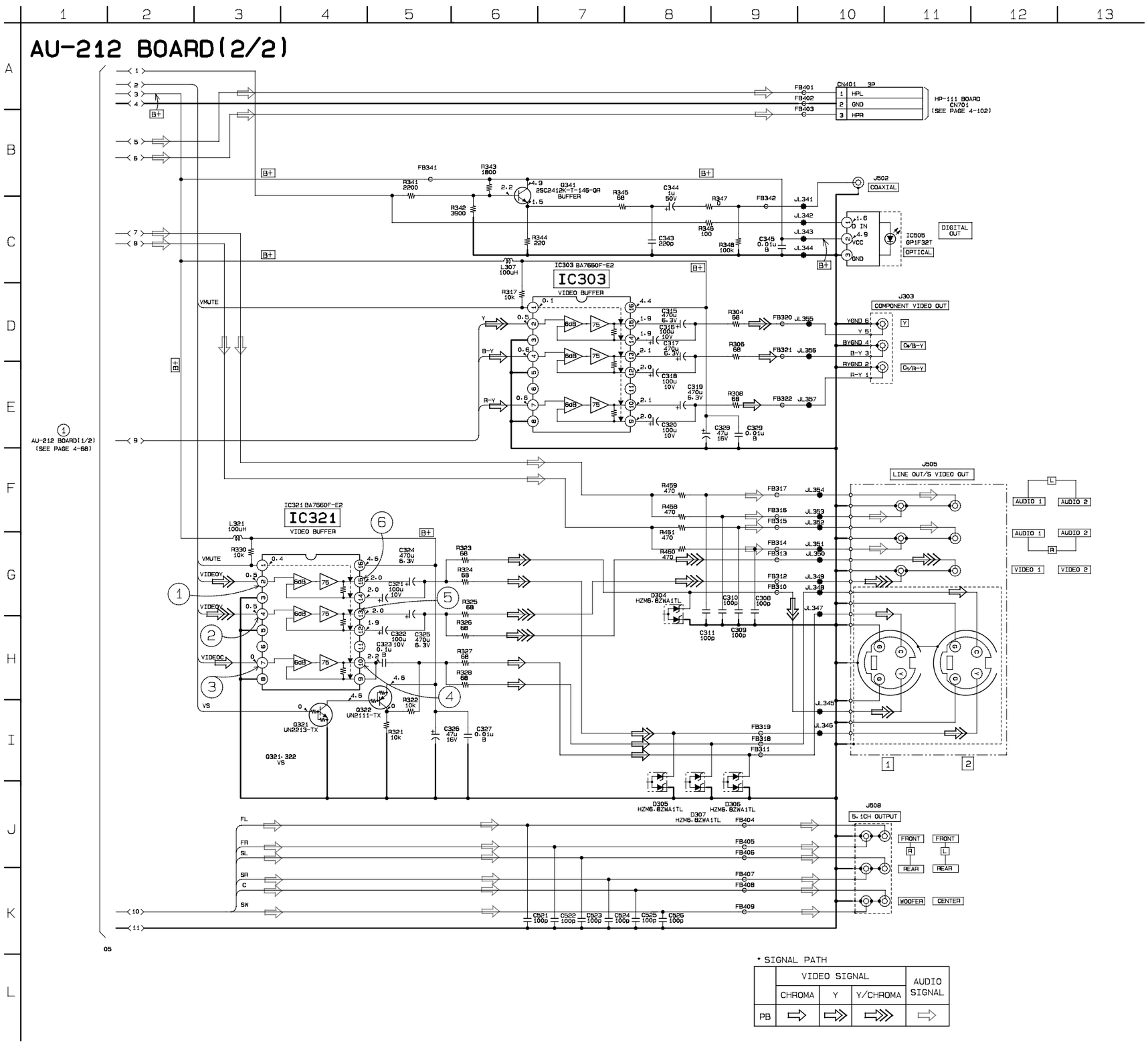
* SIGNAL PATH

	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA	
PB	⇨	⇨	⇨	⇨

AU-212 (VIDEO BUFFER) SCHEMATIC DIAGRAM **• See page 4-65 for printed wiring board.**

– Ref. No.: AU-212 board; 2,000 series –

– DVP-S525D: AUS –

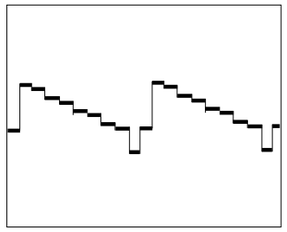


• SIGNAL PATH

	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA	
PB	⇨	⇨	⇨	⇨

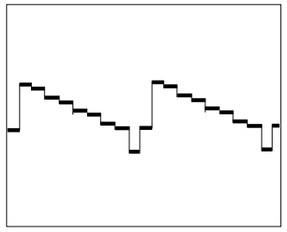
• Waveforms

❶ IC321 ②



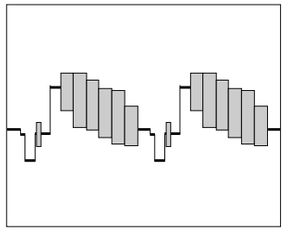
1.1 Vp-p (H)

❻ IC321 ⑮



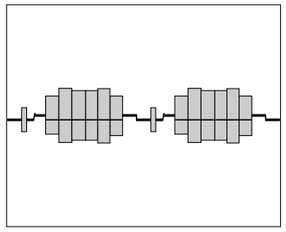
2.0 Vp-p (H)

❷ IC321 ④



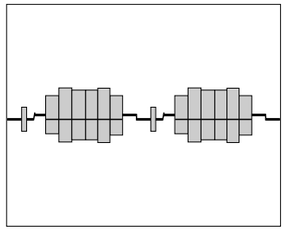
1.2 Vp-p (H)

❸ IC321 ⑦



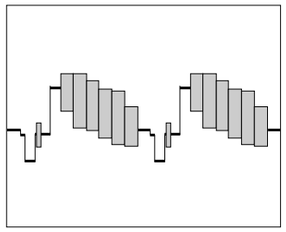
860 mVp-p (H)

❹ IC321 ⑩



1.8 Vp-p (H)

❺ IC321 ⑬



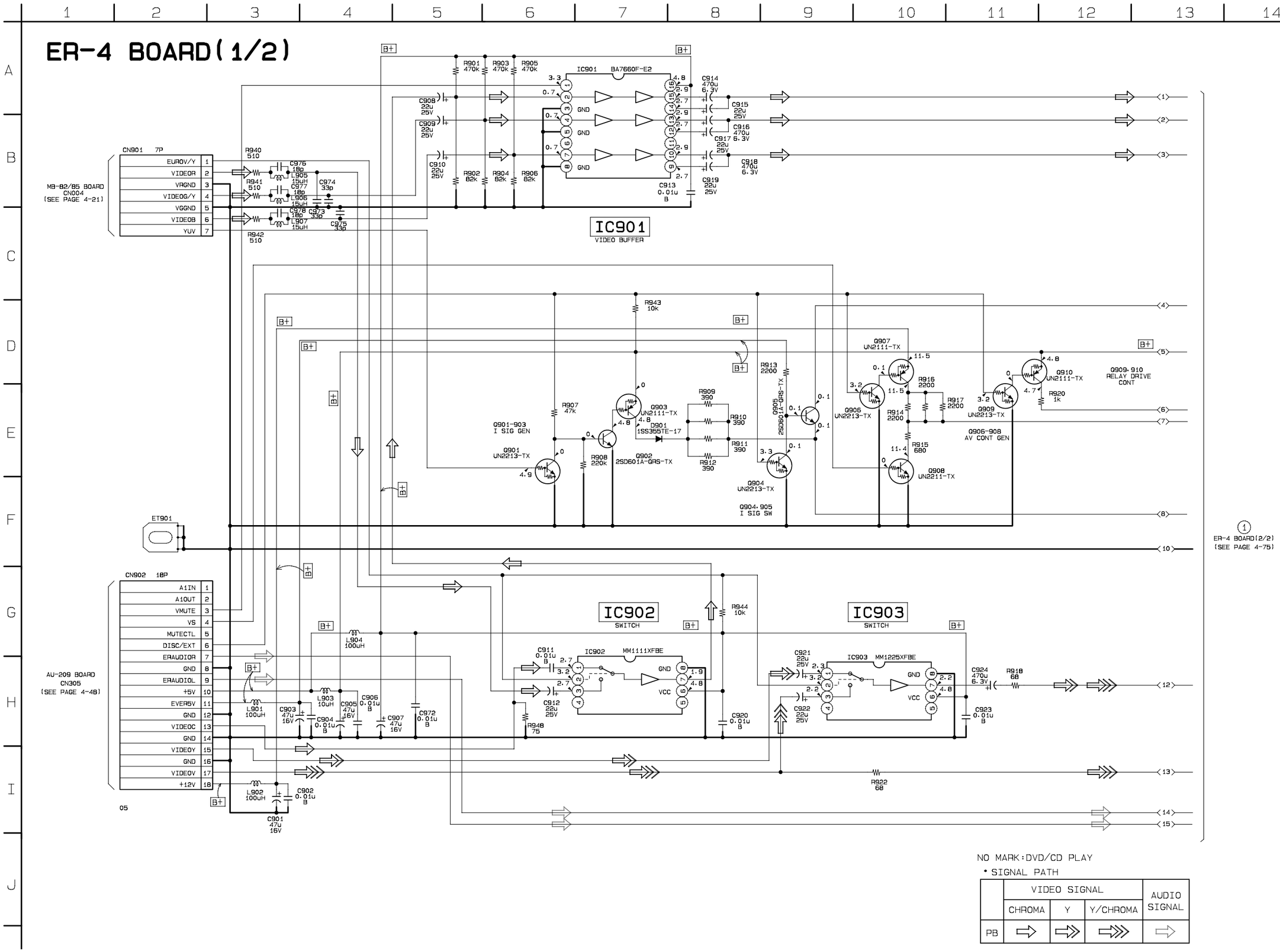
2.4 Vp-p (H)

VIDEO BUFFER
AU-212 (2/2)

ER-4 (EURO AV1) SCHEMATIC DIAGRAM **• See page 4-71 for printed wiring board.**

– Ref. No.: ER-4 board; 2,000 series –

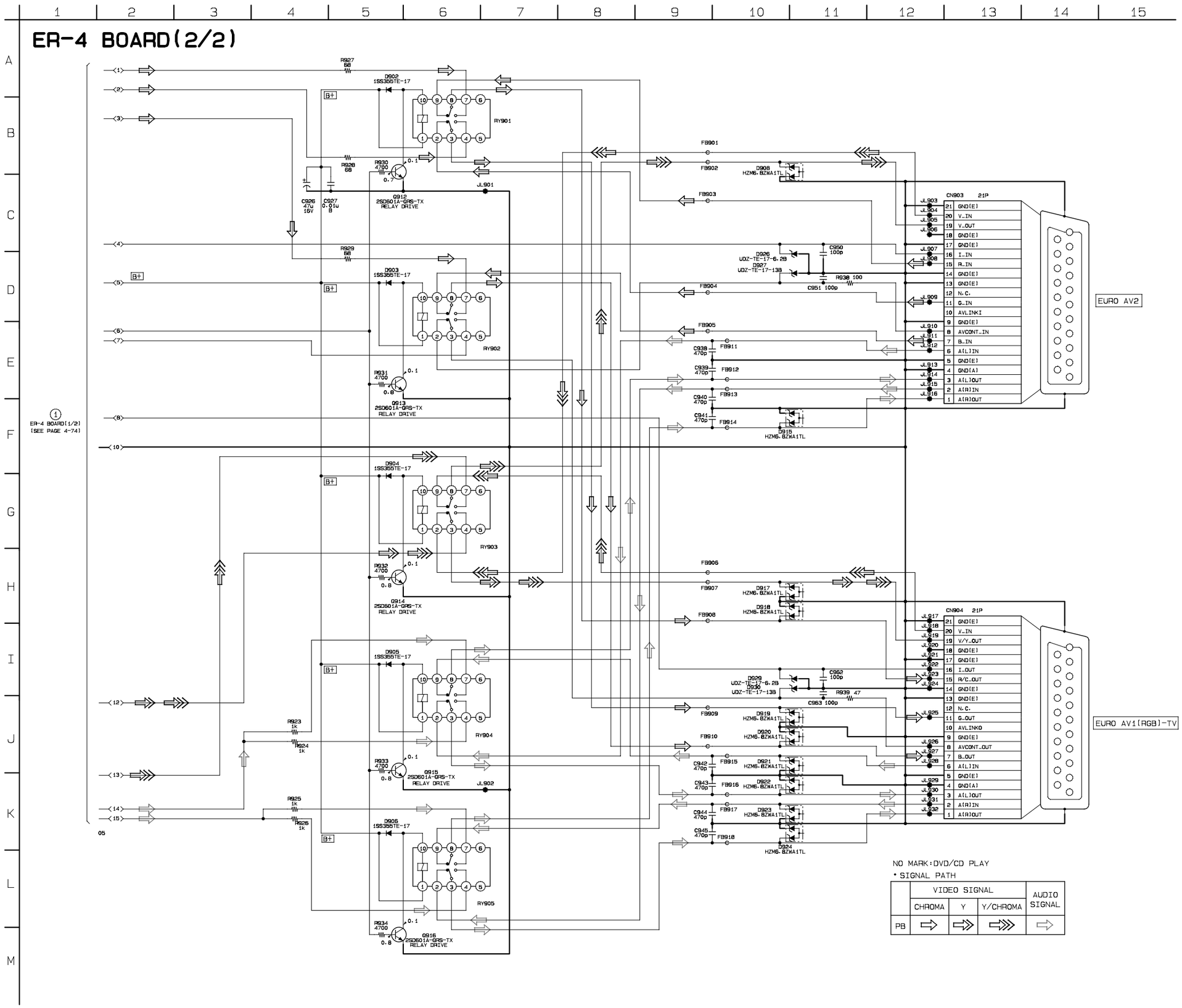
– DVP-S325/S525D: EXCEPT AUS –



ER-4 (EURO AV2) SCHEMATIC DIAGRAM **• See page 4-71 for printed wiring board.**

– Ref. No.: ER-4 board; 2,000 series –

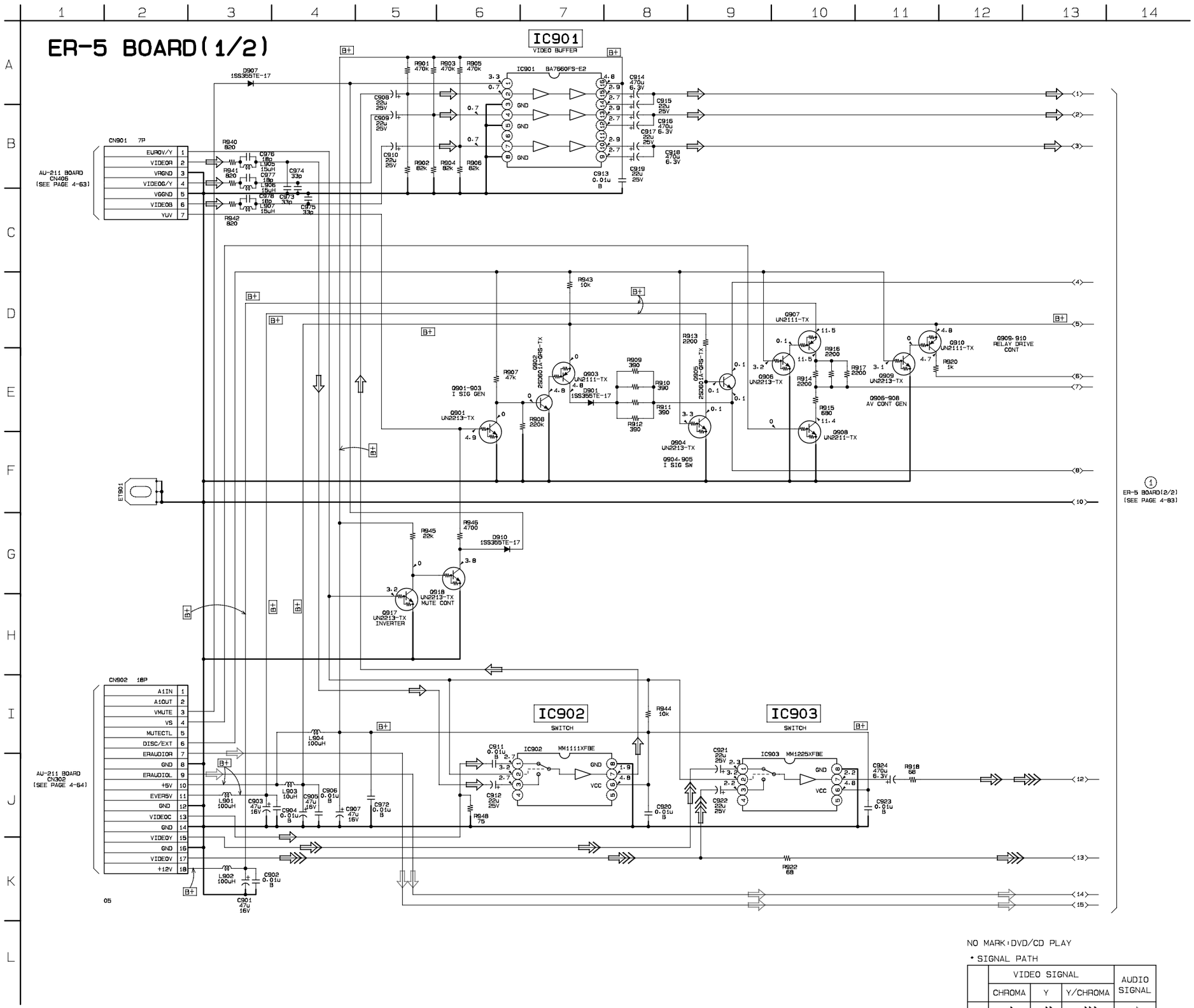
– DVP-S325/S525D: EXCEPT AUS –



ER-5 (EURO AV1) SCHEMATIC DIAGRAM **• See page 4-77 for printed wiring board.**

– Ref. No.: ER-5 board; 2,000 series –

– DVP-S725D: EXCEPT AUS –

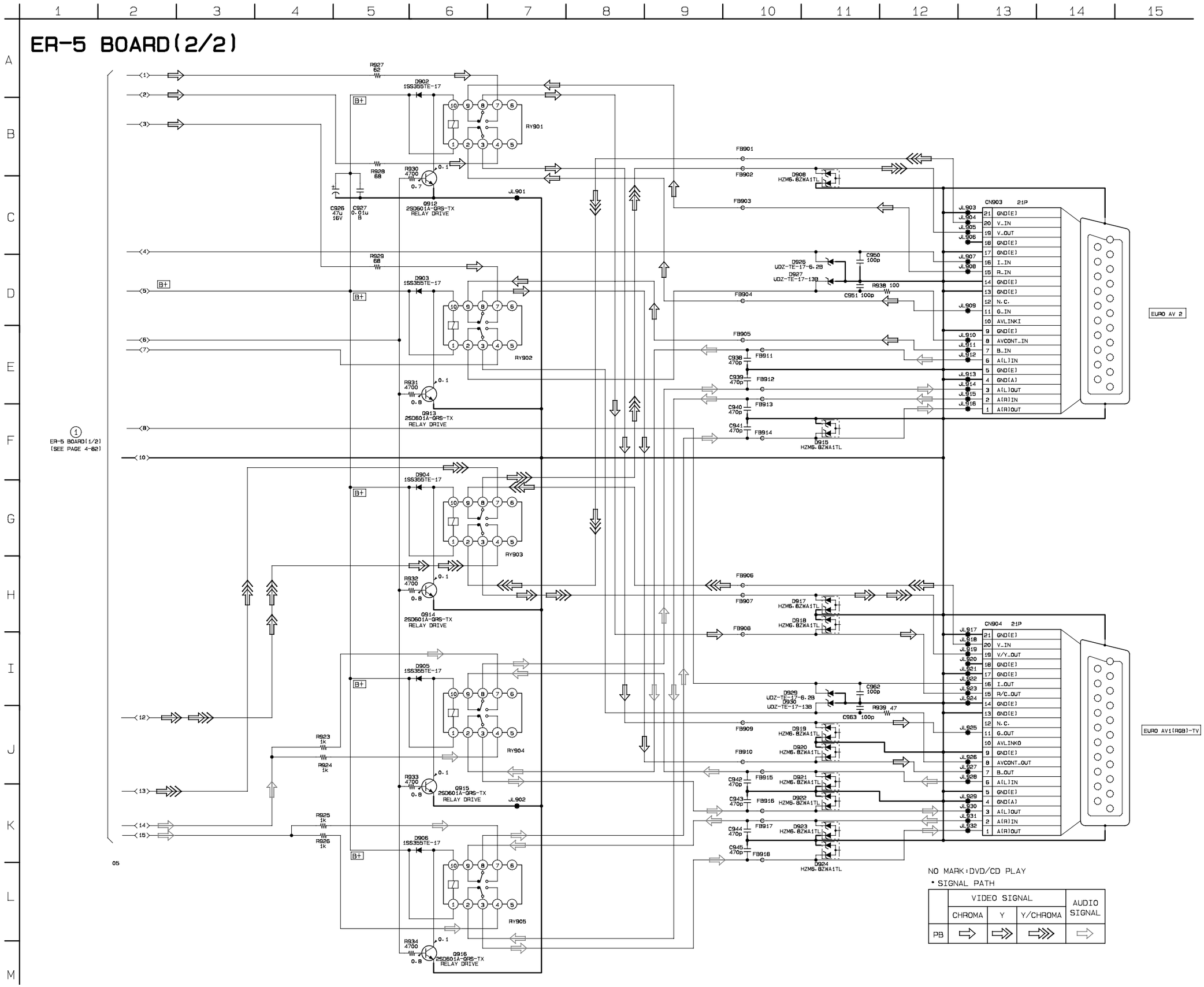


ER-5 (EURO AV2) SCHEMATIC DIAGRAM **• See page 4-77 for printed wiring board.**

– Ref. No.: ER-5 board; 2,000 series –

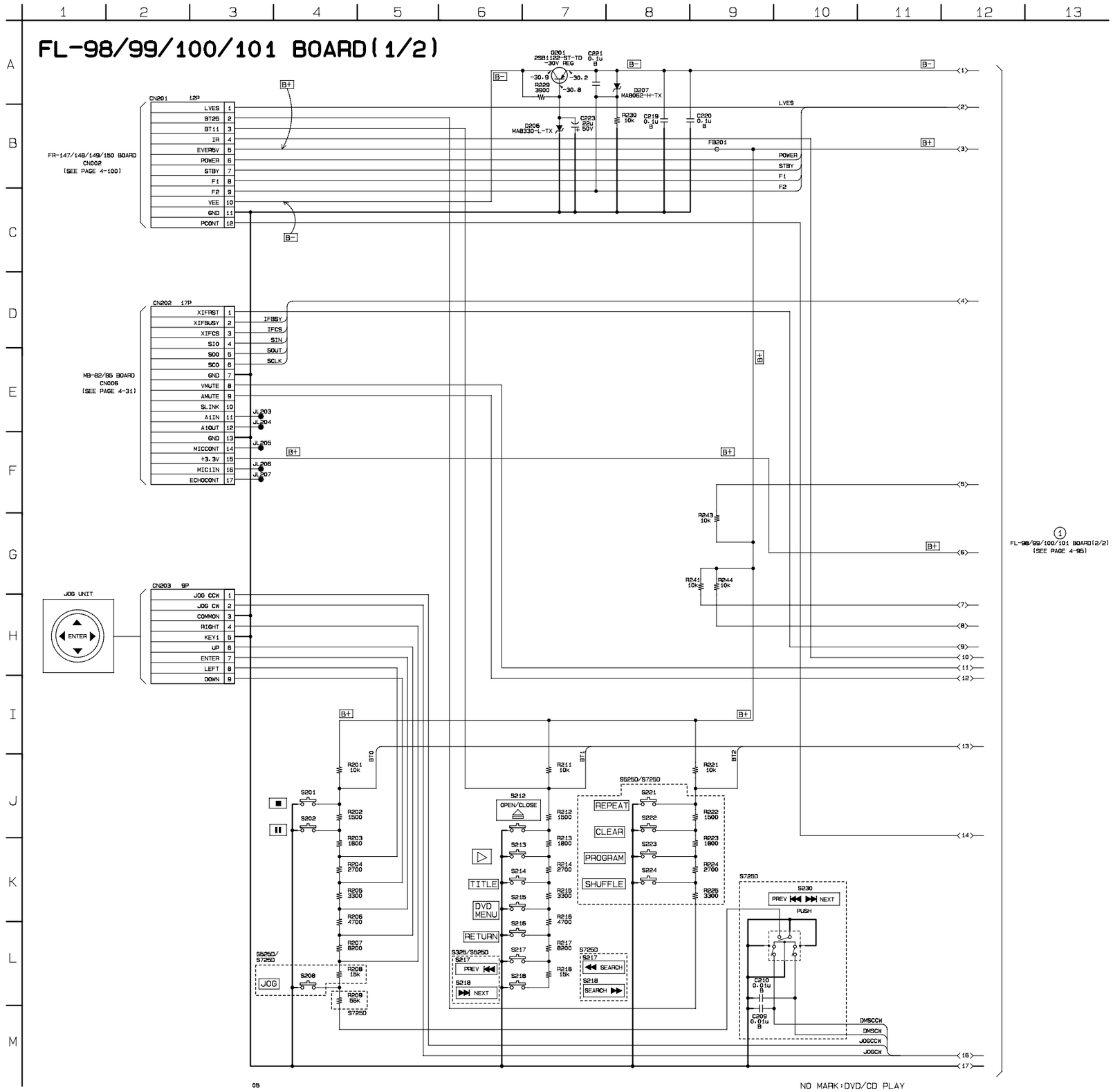
– DVP-S725D: EXCEPT AUS –

ER-5 BOARD(2/2)



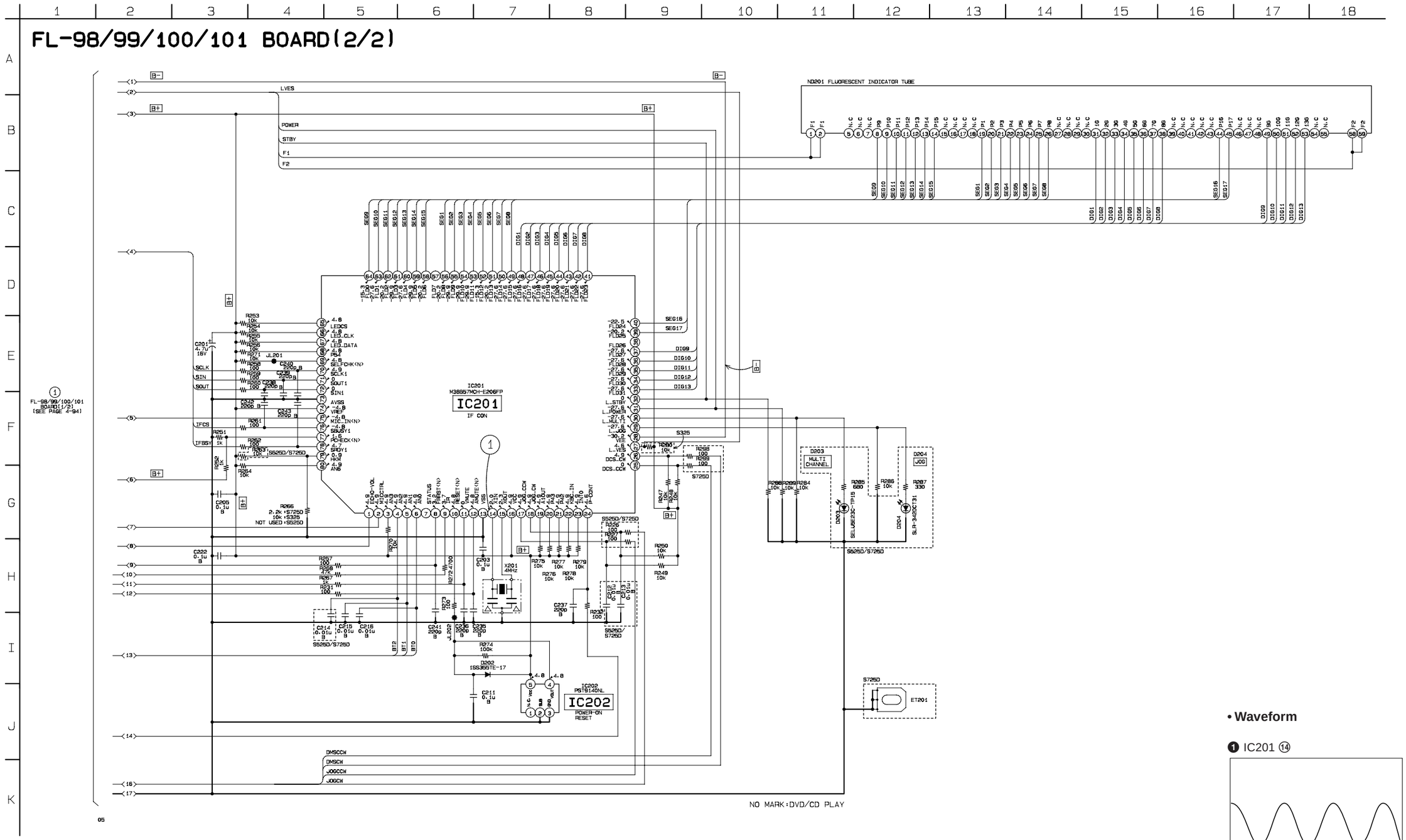
FL-98/99/100/101 (FUNCTION SWITCH) SCHEMATIC DIAGRAM **• See pages 4-87 and 4-89 for printed wiring board.**

– Ref. No.: FL-98/99/100/101 board; 2,000 series –



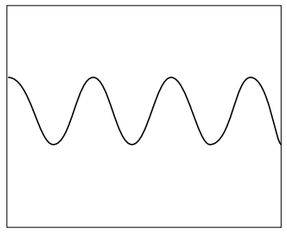
FL-98/99/100/101 (IF CON) SCHEMATIC DIAGRAM • **See pages 4-87 and 4-89 for printed wiring board.**

– Ref. No.: FL-98/99/100/101 board; 2,000 series –



• **Waveform**

❶ IC201 ⑭



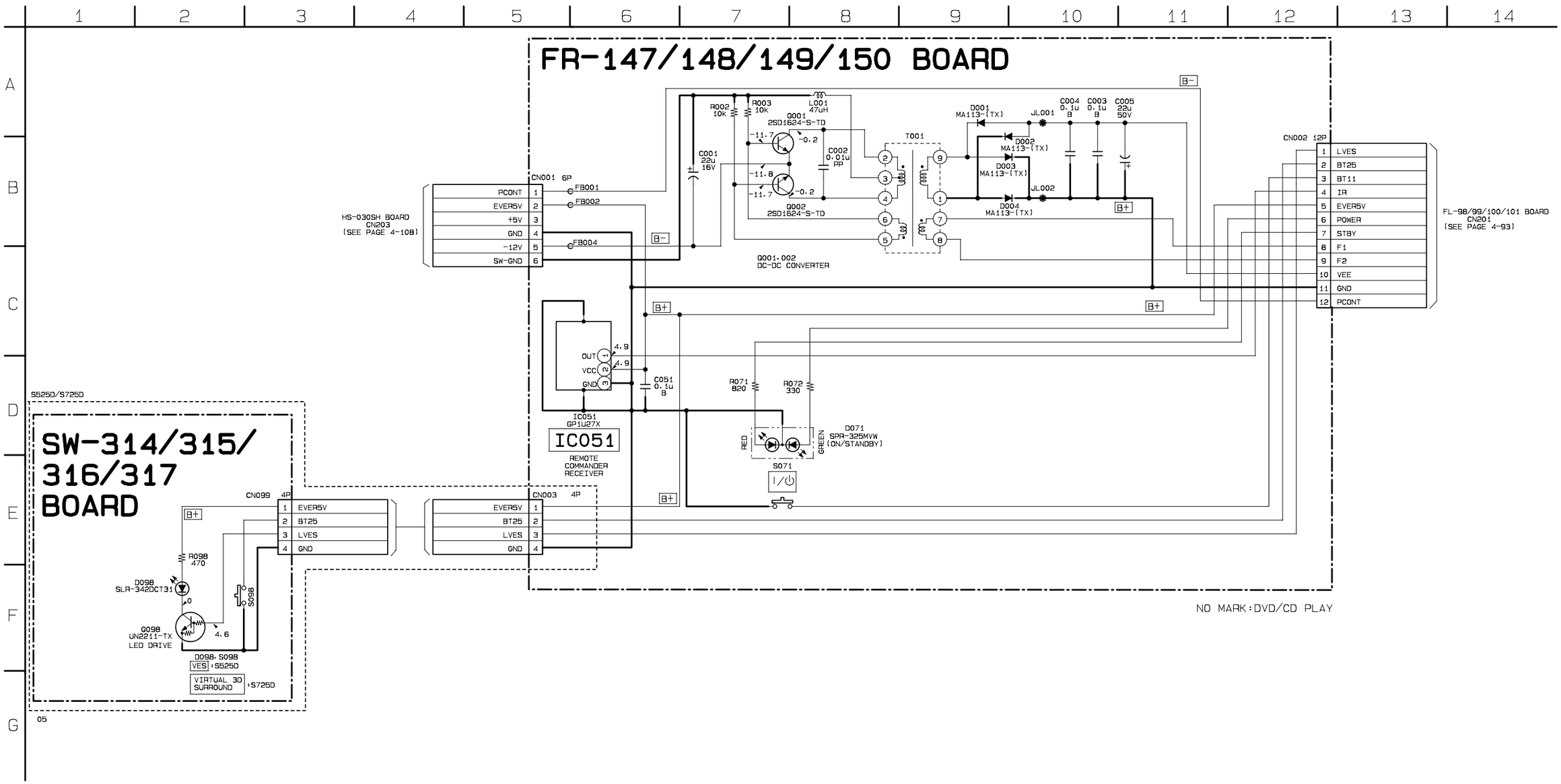
3.9 Vp-p (4 MHz)

IF CON
FL-98/99/100/101 (2/2)

SW-314/315/316/317 (SURROUND SWITCH), FR-147/148/149/150 (IR/POWER SWITCH) SCHEMATIC DIAGRAM

– Ref. No.: SW-314/315/316/317 board and FR-147/148/149/150 board; 4,000 series –

– DVP-S525D/S725D –

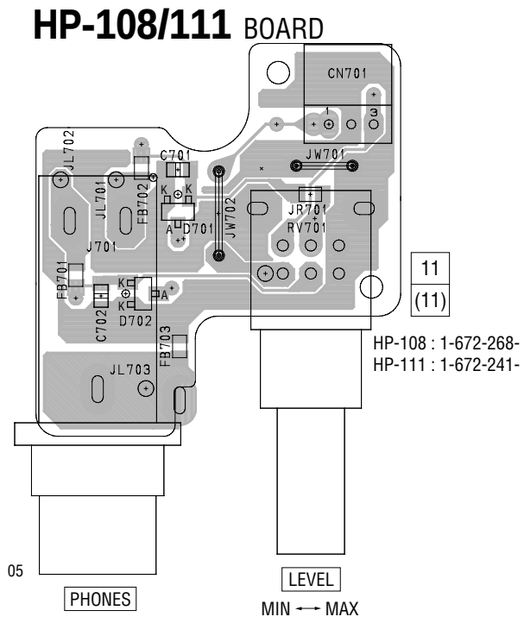


HP-108/109/110/111 (HEADPHONE) PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAM

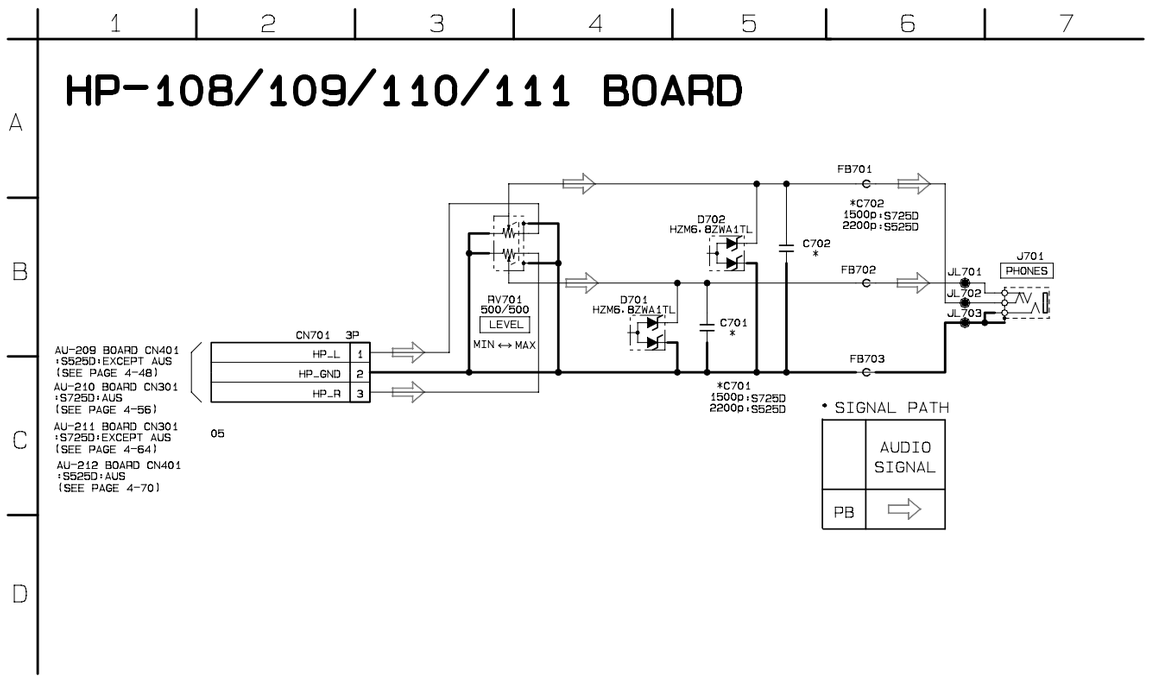
– Ref. No.: HP-108/109/110/111 board; 2,000 series –

There are few cases that the part isn't mounted in this model is printed on this diagram.

– DVP-S525D –

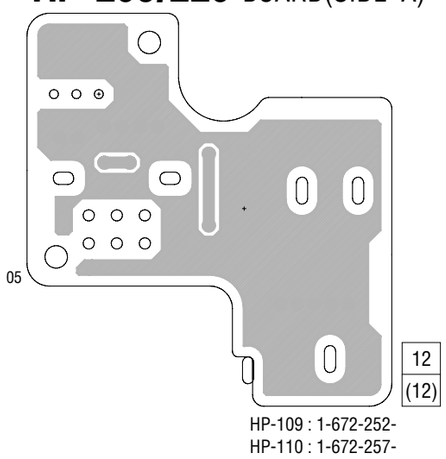


– DVP-S525D/S725D –

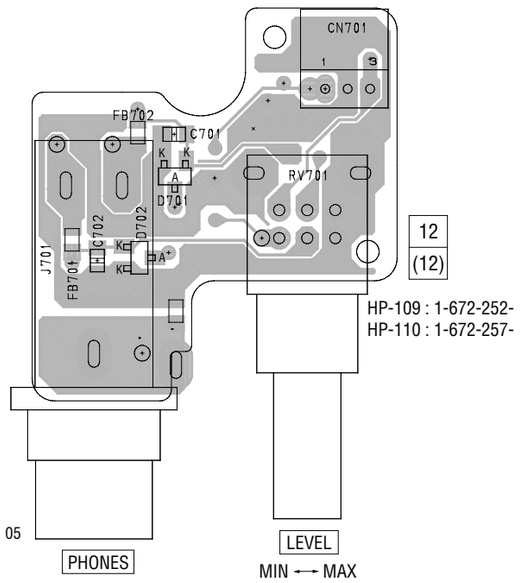


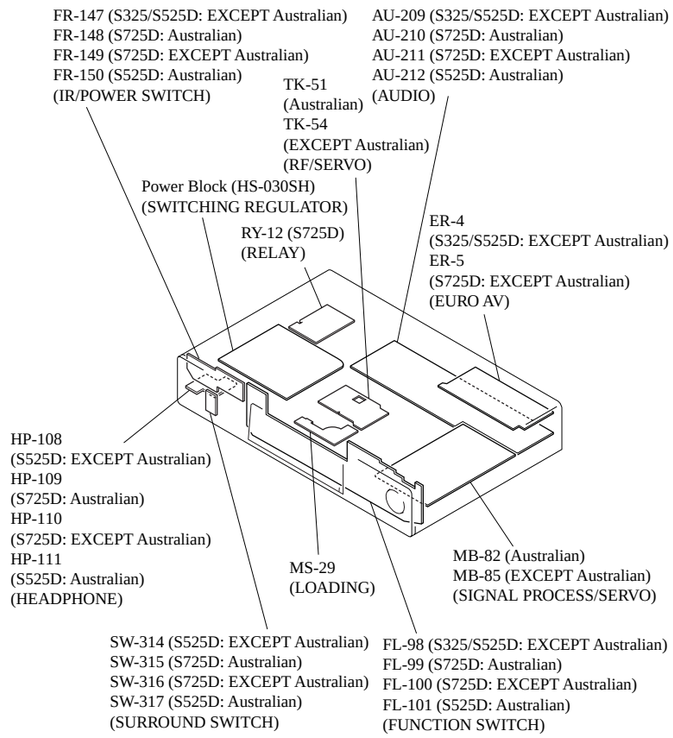
– DVP-S725D –

HP-109/110 BOARD(SIDE A)



HP-109/110 BOARD(SIDE B)





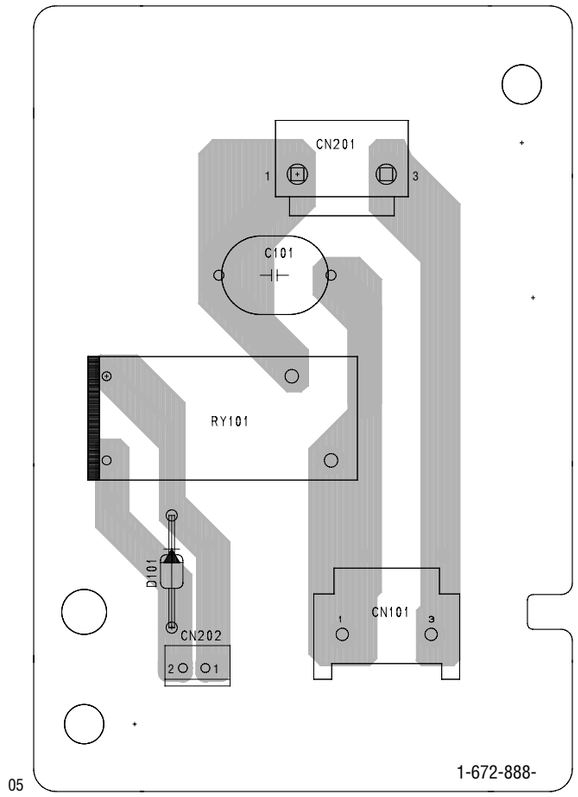
RY-12 (RELAY) PRINTED WIRING BOARD AND SCHEMATIC DIAGRAM

– Ref. No.: RY-12 board; 2,000 series –

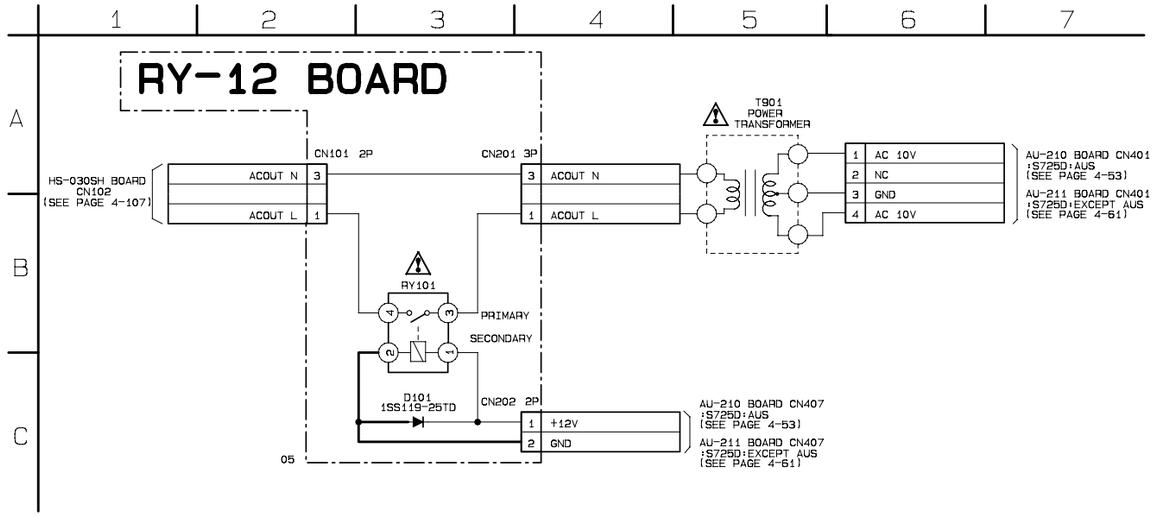
There are few cases that the part isn't mounted in this model is printed on this diagram.

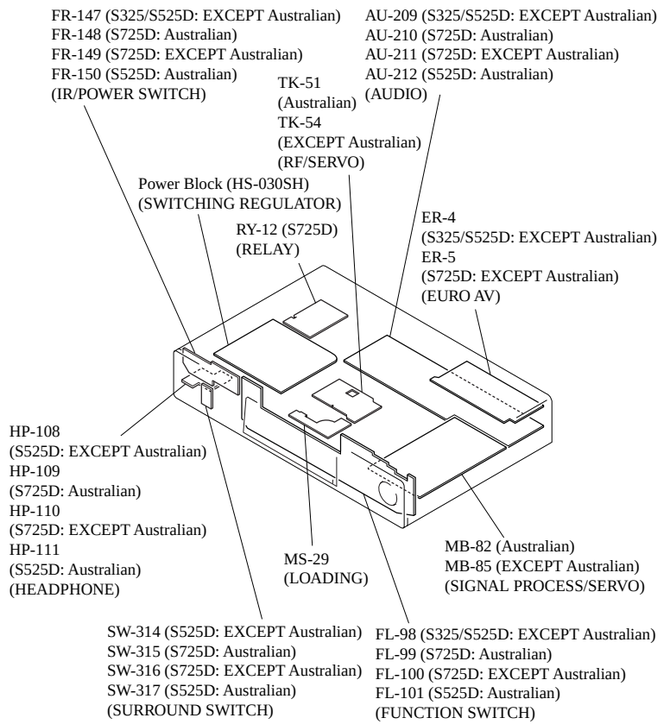
– DVP-S725D –

RY-12 BOARD



– DVP-S725D –



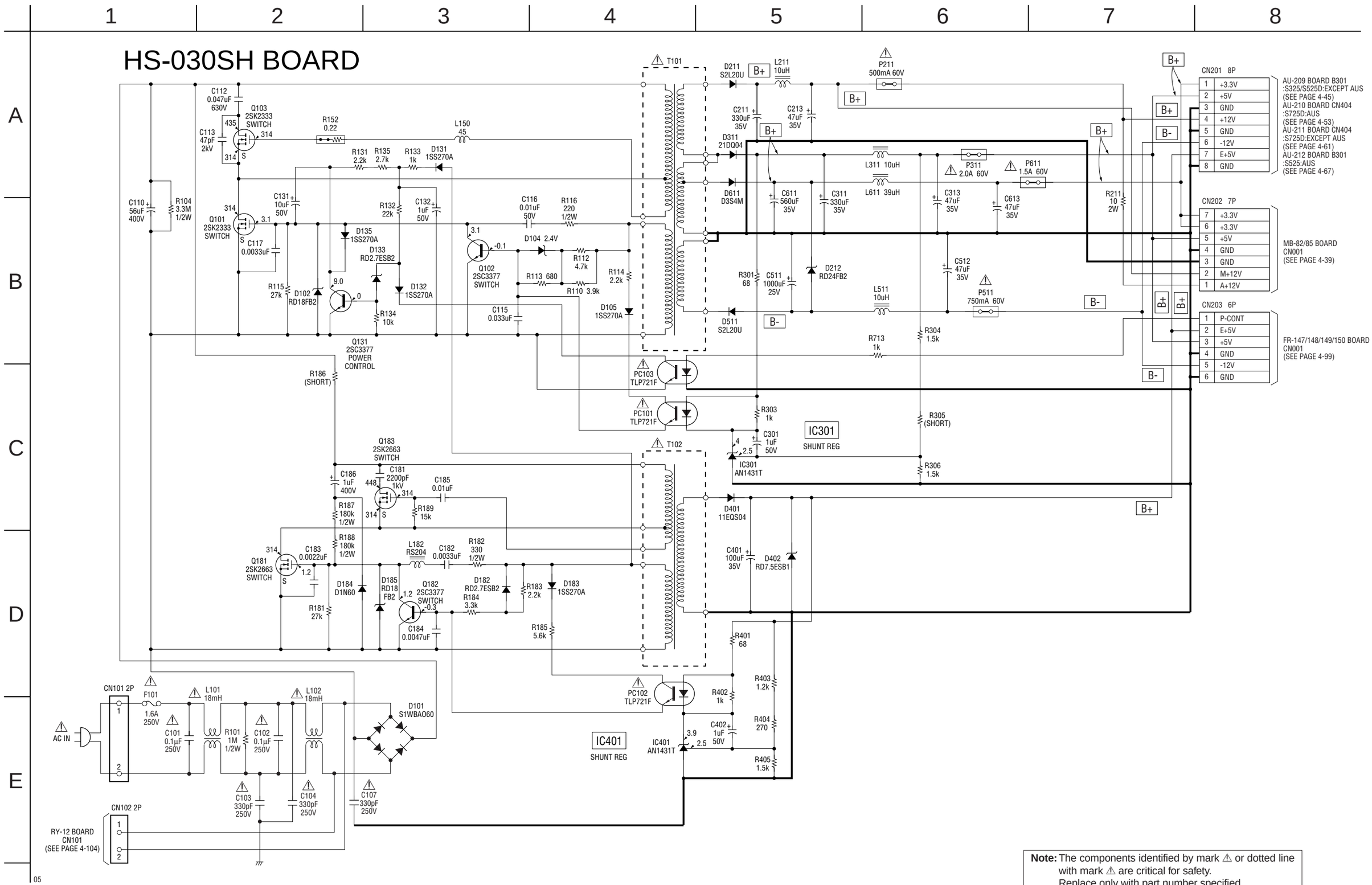


Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

HS-030SH (SWITCHING REGULATOR) SCHEMATIC DIAGRAM

– Ref. No.: HS-030SH board; 6,000 series –

HS-030SH BOARD



Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.